THE MEDICAL VALUE OF PSYCHOANALYSIS

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By

FRANZ ALEXANDER, M.D.

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PREFACE

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THE place of psychoanalysis among the sciences is a question which, in the course of the last decade, became even more problematic than it was in those early days when Freud and a small group of his followers, with the help of a new psychological technique, tried to cure certain cases of so-called "nervous" disturbances. If psychoanalysis had remained such a modest technical device in psychotherapy, the question of its belonging to medicine would never have been raised. Since, however, it has developed a dynamic theory of personality, it came to have a bearing on all sciences which deal with the products of the mind. At present psychoanalytical psychology cannot be claimed by medicine alone. But its relation to medicine itself has changed since the analytic therapy has been based more and more on the knowledge of pathological mental processes and on certain general dynamic and structural assumptions concerning the make-up and functioning of the personality.

With the development of analytic theory, it has become increasingly clear that psychoanalysis is an essential contribution to medicine and forces us to revise certain fundamental concepts in medicine and biology. I do not think, however, that medicine need resent such a revaluation of its methods and fundamental assumptions, since the revaluation of basic scientific concepts is a typical feature of our present age. The critical movement began with physics, whereas medicine was for a long time spared this kind of revolution. The principle that the phenomena of life can be reduced to physico-chemical processes—a view which was unquestionably responsible for the speedy progress in biology and medicine during the last fifty years—dominated and directed medical thinking from its beginnings as a natural science. I do not think that this principle is endangered by the new psychological approach to biological phenomena, although this new approach offers fundamentally new aspects. In the first place, it makes a more general application of the dynamic point of view possible than the one-sided somatic analysis of the processes of life. Not the validity but the exclusiveness of the somatic analysis of biological phenomena seems to be shattered.

This book is mainly an attempt to clarify the problematic relation of psychoanalysis to medicine, though in the chapter on "Psychogenic Factors" I

try to go further and discuss the question of the significance of psychoanalytical principles for biology in general. It is also an attempt to dissipate the prejudice against psychoanalysis in biological and medical circles, among those who feel that the introduction of psychological views into medicine threatens to reduce the exact nature of this youngest of the natural sciences. The aims of the book, therefore, make it important to give a clear and systematic presentation of the methodological and theoretical concepts which are generally accepted and considered as fundamental in the present system of psychoanalysis.

I must confess that I have felt a systematic presentation, such as I tried to give in the first two chapters, to be most difficult. The gradually increasing insight into the make-up and functions of the mind, which has been gained in the last ten years, has led to a consistent theory of human personality which, however, has not yet been formulated in an organized and systematic fashion. The incompleteness and some of the defects of my presentation may be excused by the novelty of my undertaking. I feel, however, that in the first chapter I have succeeded in formulating the fundamental characteristics of the psychoanalytical method in a way that may perhaps satisfy even the requirements of an epistemological treatise. In the second chapter, in

which I have described the present status of psychoanalytic theory, I have tried to restrict myself to what seemed to me essential as well as empirically best founded. This may explain the impression of incompleteness, which especially the trained psychoanalyst may receive in reading this part of the book. In this chapter my aim has been to express the intimate relation of the therapeutic concepts to the more general theory and to show that the knowledge of psychological processes which is gained during treatment is the solid basis both of analytic theory and therapy. Whatever changes theory and therapeutic technique may undergo in the future, the description of the psychological processes observed during treatment is the most certain portion of psychoanalysis and represents also the most detailed and reliable insight into human personality of which psychology is capable at the present time. I have tried to give a notion of this core of the psychoanalytic system as clearly and simply as is feasible, without sacrificing to simplicity the truthfulness of the picture. I hope that it will help to dissipate the hazy and inadequate notions which usually even well oriented physicians and laymen have of psychoanalysis. I hope also to have made clear that analytical therapy, as far as knowledge of the "therapeutic process" is concerned, is as well founded as therapy in organic medicine, and that a great part of medical

therapy is even far behind analytical technique in its understanding of the curative processes.

The ideas developed in the chapter about Psychogenic Factors follow the lines of a series of lectures, which I gave at the University of Chicago in the years 1930-1931. The content of the first chapter was given January 15, 1931, as a Harvey Lecture in the New York Academy of Medicine. Several chapters have been published previously in the "Journal of the American Medical Association," the "Archives for Neurology and Psychiatry," and in the "American Journal of Orthopsychiatry." Although some alterations have proved necessary, I am indebted to the various editors for permission to reprint. I wish, also, to thank Dr. Thomas French and Mr. Robert Casey for their kind revision of the manuscript.

F. A.

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CHAPTER I

PSYCHOANALYSIS AND MEDICINE

I. PSYCHOANALYSIS AND MEDICINE

FOR about thirty years psychoanalysis, a theoretical concept of the personality, a precise and elaborately described method of psychological research and a therapy of mental disturbances, has been living a peculiarly isolated existence on the borderline of medicine and of the natural sciences. This borderline existence is not due entirely to the unreceptive attitude of medicine toward psychoanalysis, for psychoanalysis itself has also been undecided as to where it belongs. Many psychoanalysts, in fact, question whether psychoanalysis should not be considered a distinct discipline, related to medicine but essentially independent of it, just as archæology, though related to history, is nevertheless itself a self-sufficient science, or as paleontology is related to geology but different in its methods and purpose.

Even those psychoanalysts who, like myself, are convinced that, so far as psychoanalysis is therapeutic it belongs to medicine, cannot overlook the fact that its subject matter, methods and terminology are so different from those of medicine that its assimilation to it is extremely difficult. Indeed, a clear decision on the citizenship of this young empiric discipline in the realm of science is theoretically as well as practically a highly complicated and unsolved problem. Medicine aims within certain limits to understand the body as a physico-chemical machine; psychoanalysis deals with psychological facts and tries to influence psychological processes by psychological methods. Therefore, by definition, psychoanalysis should be excluded from medicine.

Mental processes, however, belong to the characteristic manifestations of biological systems and, as is generally known, influence such physiological phenomena as weeping, blushing, or the secretion of the gastric juice. Furthermore, a number of diseases manifest themselves in mental disturbances such as psychoses and psychoneuroses. Even after the cell-physiology of the brain has been highly developed it is improbable

that physiological or pharmacological methods will be used to influence people's minds, for example, to persuade some one or to explain a mathematical thesis. In influencing pathological mental processes, psychological methods are used which are essentially similar to persuasion and explanation. Probably the best method of influencing disturbances of a psychological nature will always be through psychological means.

Nevertheless, to preserve the homogeneity of medicine, one might exclude psychological methods even though their scientific and therapeutic value were acknowledged, and regard psychology, pathopsychology and their practical application in psychotherapy as disciplines related to, but still lying outside of medicine. One must realize, however, that it is artificial to separate mental diseases from physical diseases, or mental processes from physical processes, for there is in reality a permanent interrelation between them. In therapy it is not always easy to decide in which cases a psychological and in which cases a physiological approach is indicated, for the individual cannot be divided into a body and a personality, since it is a psycho-biological entity.

Development of Psychoanalysis

PSYCHOANALYSIS started within medicine as an attempt to cure hysterical symptoms by psychological means. Under the influence of Charcot's studies on hysteria and its relation to hypnotic phenomena, Freud and Breuer developed the method of cathartic hypnosis. They observed that patients in hypnosis could remember certain forgotten events in their past lives which were intimately related to their symptoms. This recollection in hypnosis was accompanied by outbursts of emotion and usually followed by disappearance of the symptoms. This process of emotional abreaction in hypnosis Freud and Breuer called "catharsis" and their method "cathartic hypnosis." Freud, however, soon gave up the method of cathartic hypnosis and replaced it by the technique of free association. This technique supplied a more complete picture of the historical background of the symptoms and, apart from its therapeutic value, has yielded a deeper insight into human personality than was possible before. This method is responsible for the fact that psy-

choanalysis, two decades after it started as a modest therapeutic attempt to influence hysterical phenomena, has developed a consistent theory of the personality.

The fundamental concept of the unconscious has deeply influenced all modern thinking. The discovery of the far-reaching dynamic effect of unconscious mental processes on overt behavior, which has shown the limitations of the rational and conscious part of personality, has become so fundamental to the mental attitude of the educated man of the twentieth century that without it much of modern life is unintelligible. It is not an exaggeration to compare the change in attitude toward external reality which has resulted from this discovery with the change that the Copernican system effected four hundred years ago. The theory of the unconscious involves a new and definite break with the anthropocentric attitude toward the external world. The system of Copernicus destroyed anthropocentricity in the spatial cosmological sense, but man remained anthropocentric in a psychological sense. This becomes especially clear if we recall the doctrines of the rationalistic philosophers of the seven-

teenth and eighteenth centuries, who put all their faith and hope in the omnipotence of the thinking mind. Instead of the earth, the human mind became the center of the universe. This started with Descartes' teaching that nothing is certain except one's own thoughts, and this doctrine led in a direct line to Kant's consistently anthropocentric thesis: The external world, as we see it, is dependent on the mind and its categories, which are themselves absolute and belong to the unchangeable structure of the mind. Psychoanalysis as a genetic theory has dethroned these despots of philosophic thinking, the Kantian categories, and considers them as products of the adjustment to the physical environment. The infant's mental processes are subject neither to the logical nor to the moral categories of Kant and, what is more important, even in the adult's unconscious personality there are mental processes which are not subject to the laws of logic. These processes, manifest for example in dreams, do not follow the law of causality, only that of temporal sequence, and are not bound by such axioms as that the same thing cannot be at the same time

in two different places. Briefly, rational thinking as well as moral feelings and prescriptions are products of the adjustment of the organism to its environment, but they do not entirely determine our thinking and behavior, and a dynamically powerful portion of mental life is neither rational, i.e. adjusted to the external world, nor moral, i.e. adjusted to the demands of the community. The rationally adjusted part of the personality in every one is in steady conflict with the unadjusted layers. The means of eliminating the disturbing influence of unadjusted tendencies is a dynamic act called repression, by which the unadjusted mental forces are excluded from consciousness and become unconscious. Thus, human personality can be divided into two parts, the adjusted "ego" and the original and impersonal "id," which is not yet brought into a harmonious unity and which contains different conflicting instinctual tendencies. In psychopathic personalities this conflict between the infantile and the adult portions of personality is quantitatively greater but qualitatively the same as in normal individuals. Thus mental disturbances, such as psychoneuroses and psychoses, can be un-

derstood as more intensive and overt manifestations of the unadjusted unconscious parts of the personality.

All these concepts are today not only generally accepted but emotionally assimilated, and like the theory of evolution or the cosmological doctrine of the planetary systems have become an integral part of modern thinking. The emotional consequence of this modified perspective is that man now feels himself more definitely to be only a small part of the universe. Because his belief in the absoluteness of his rational thinking has been broken, even this last claim to a special position in the world has lost its foundation. Rational thinking can no longer be regarded as its own self-sufficient cause, unapproachable by further scientific research, but must be thought of as a product of adjustment to the world, and is not only not absolute but is as relative as that birds fly and fishes swim. Our logical thinking is just as little the only possible form of thinking as flying is the only possible form of locomotion.

The scientific consequence of this new perspective is that psychology becomes relevant to biology. Thinking is one of the functions of the bio-

logical system, one means of orientation to the external world. The mental apparatus can be understood in the same way as the circulatory system, which in all its details is adjusted to the hydrodynamic problems which it has to solve. Similarly, the functions of the mental apparatus can be understood as adjustments to the problem of orientation to the environment. No teleologic philosophy is involved in this view.

Thus definitely separated from philosophy, psychoanalytic psychology becomes a mechanical or, better, a dynamic science and describes the functions of the mental apparatus in terms of mechanisms or dynamisms. It studies in detail the development of the mind in all its phases during the difficult process of adjustment, and follows the changes from the unorganized, unsystematic, diffused manifestations of the infant's mind into the complicated system of the adult ego. It explains pathological mental phenomena as due to the incomplete mastery of early unadjusted periods and it can determine, to a large extent, which phase of development was unsuccessfully passed through, or, in other words, to which phases of early development certain types

of mentally disturbed individuals remain fixed.

This genetic and dynamic approach to the understanding of mental disturbances can be considered a decisive step in psychopathology. The psychodynamic approach makes possible the intelligent and systematic influencing of pathological mental processes, that is to say, a causally oriented psychotherapy.

Psychotic and neurotic symptoms can be understood on the basis of this conflict between the infantile remnants and the adult part of the personality. The chief difference between a neurosis and a psychosis is the extent to which the repressed unadjusted mental content breaks through into consciousness, after overcoming the resistance of the repressive forces. This breaking through of repressed content is much more complete in the different forms of psychoses. In the end-phases of schizophrenia, for example, one has the impression that the ego has given up all resistance and is dominated entirely by hallucinatory mental processes. In a psychosis even the very first adjustment of the ego breaks down, i.e. the capacity to subordinate the satisfactions of imagination to the evidence of sense perceptions,

and the consequence is a loss of orientation to the world. Of course, all the later achievements of development, such as esthetic and moral restrictions and inhibitions, also disappear in the psychosis. A psychosis can thus be considered as a flight from reality and, more particularly, from an adult form of existence back to childhood, to a happier time, in which phantasy prevails unhampered by actuality.

In the different forms of psychoneuroses the conflict between the two poles of personality, the conscious ego and the primitive id, is more obvious, since neither of them has a decisive victory. If the end-phases of a psychosis be compared with a silent battlefield after all the soldiers on the one side have been killed, a psychoneurosis is a battle still in progress, for psychoneurotic symptoms are partly manifestations of repressed tendencies and partly reactions of the ego against these tendencies. In psychoneuroses the conscious ego has still the upper hand, although it does not succeed entirely in repressing the unconscious tendencies. The important fact which shows the partial control of the ego is that the unconscious mental content can appear in consciousness only

in distorted forms. These distortions are compromises between the two antagonistic forces in the mental apparatus; that is to say, they are a compromise between repressed and repressing forces. In these distorted forms the unconscious content can appear in consciousness without hurting the conscious personality.

Psychoneurosis and psychosis can be considered as different stages of the same mental process, the breaking through of the unconscious, repressed, primitive part of personality. In a psychosis the process goes much further, for the difference between conscious and unconscious disappears and the unconscious dominates the whole personality, whereas in a neurosis the principal achievement of the later ego-development, the acceptance of reality, remains more or less intact, and the unconscious tendencies penetrate the ego only in isolated symptoms, which play the rôle of foreign bodies embedded in normal tissue.

Apart from these results in the field of psychopathology, one type of dynamic manifestation of repressed mental force has a special significance for internal medicine: the so-called hysterical dysfunctions and organ-neuroses, in which

unconscious psychic tendencies produce physical symptoms. The investigation of this field requires an intimate coöperation of internal medicine and psychoanalysis, and much must be left to the future.

All these discoveries of psychoanalysis in the field of mental pathology have become integral parts of modern medical thinking as the fundamental notions of the unconscious and repression have penetrated contemporary thought. The theory of fixation to infantile attitudes and the characteristic tendency of psychoneurotics and psychotics to regress to these early patterns of thinking and feeling belong today to the basic concepts of psychiatry. Furthermore, psychic mechanisms such as rationalization and projection, which have been understood as means of solving the conflict between the conscious ego and the wishes and tendencies unacceptable to it, are so generally accepted and employed not only in psychiatry, but even in general thought and conversation, that the young student of medicine often does not even know their origin in the psychodynamic system of Sigmund Freud.

In addition to the explanation of the appar-

ently senseless mental processes of the psychoneurotic and insane, psychoanalysis has become the psychology of all kinds of irrational phenomena, such as casual slips and errors of everyday life, free-phantasy and especially dreams. It shows that the apparent irrationality of all these phenomena is due to the fact that our mature rational thinking has grown away from the more primitive stages represented in dream life. If, however, we relearn the primitive language of the mental life of our childhood, we are able to understand the psychological meaning of our dreams.

Resistance to Psychoanalysis

In what follows we shall concentrate our interest on those fundamental results of psychoanalytic psychology which have become or are becoming significant for medicine. These results are by no means of such a character that they explain the resistance offered to them, especially by the medical world. On the contrary, just this approach to the problems of mental life brings

psychology nearer to biology and severs its traditional connection with philosophy.

As a matter of fact, the resistance to psychoanalysis is a complex phenomenon and has changed its nature during the thirty years since psychoanalysis began to affect the habits of thinking and feeling of the scientific world and the general public. Resistance was, at first, largely emotional and due to certain special results of the new empirical and microscopically detailed study of mental life. The discovery of infantile sexuality and of certain infantile, asocial and consequently repressed mental tendencies, which are present in everybody's unconscious, provoked general hostility. These first manifestations of resistance have been so often and so well described that there is no need to repeat them, especially as they have largely disappeared. In the last thirty years the world has changed a great deal in both its emotional and intellectual attitude, and to this change psychoanalysis has substantially contributed. This first, heroic period of psychoanalysis, in which it has to fight chiefly against emotional prejudices, is practically over. The Œdipus complex has found its acceptance

in two most conservative places—in the Oxford dictionary and *Punch*. Psychoanalysts who still think that they have to awaken humanity from its indolent sleep are tilting with windmills.

Resistance has become gradually more intellectual. This intellectual resistance is based on inveterate habits of thinking and established methods of investigation. It is no longer directed against the general or philosophic consequences of psychoanalysis which have become generally assimilated into modern thought and has, indeed, disappeared from all fields except the birthplace of psychoanalysis from medical research and therapy. Psychoanalysis no longer needs to seek acceptance as a theory of personality but of medicine, in spite of the fact that it is due to this new dynamic point of view that psychiatry has advanced beyond its merely descriptive stage and has become an explanatory science.

Let us turn our attention now to this more serious intellectual resistance which makes it so difficult for the medical world to accept psychoanalysis.

I have referred already to the kernel of this resistance. Psychoanalysis deals with psychic

phenomena and so brings a new element into medicine. It introduces a subject matter which cannot be expressed in terms of time and space and threatens to disturb the homogeneity of medicine, which would prefer to deal exclusively with physico-chemical facts and to employ chiefly experimental methods. The subject matter as well as the procedure of psychoanalysis is apt to arouse the natural scientist's distrust of psychological facts and methods. Thus the paradoxical situation has arisen that psychiatry, an acknowledged part of medicine, necessarily shares the fate of psychoanalysis and loses the respect of the rest of the medical world, since—especially here in America—it has assimilated so much from psychoanalysis.

The homogeneity of a science, the uniformity of the methods employed, are no doubt respectable postulates, but there are more important principles in scientific research. There *are* mental phenomena and they *are* interrelated with other biologic phenomena, and science cannot close its eyes to phenomena only because it cannot master them with the usual tested methods. Subject matter is primary, not method, and the method

must be adjusted to the nature of the subject matter. It is, however, a common tendency of the mind, a kind of inertia of thinking, to force methods that have proved successful in one field on a new but different field, instead of seeking for new and specially adjusted methods which the new field of phenomena requires. Had psychoanalysis been an experimental science, no resistance to it would have been offered by medicine. It would in this case probably have been accepted by medicine, but it would have had to abandon the investigation of the problems of personality. On the other hand, it is undeniable that distrust of psychological method was well founded. Although psychology has claimed to be a non-philosophic discipline since the middle of the last century, until Freud's appearance it could not produce results of an empirical nature adequate to dissipate the distrust against it. Until then there had been no prospect that psychology would ever be able to disavow the pessimistic statement of Moebius of the "hopelessness of every psychology."

Indeed, to understand the personality of another individual requires methods in many re-

spects basically different from those employed in the natural sciences. Every empirical science consists in the refinement and systematic development of the methods of observation used in everyday life. In any science we can use only the senses we actually possess, although we can increase their exactness and eliminate to some degree their defects. Psychoanalysis, in contrast to earlier psychological methods, has simply refined and systematized the everyday methods used to understand other persons' mental situations. This common sense understanding is, however, a complex faculty. Its chief instrument is a kind of identification with the other person, that is, a putting of oneself in the other person's mental situation. If you observe the movements of another, the expression of his face, the tone of his voice, and if you listen also to what he says, you get an idea of what is going on in his mind. This understanding is derived from the fact that the object of observation is a being similar to the observer—both are human personalities. This similarity between observer and observed is quite essential and is found only in the field of psychology. If you observe physical phenomena, such as

the behavior of two spheres which move on a table, you are entirely limited to what you see and are absolutely unable to foretell what will happen in the next moment unless you have learned the nature of such rolling spheres through previous experiences. If you observe another person, you note his external behavior, but you also know from your own introspective experience what you feel when you behave similarly and use the same facial expression, words, movements, as the observed person does. You understand the other person's motives because you know your own reaction in a similar situation. In psychological observation the external behavior of the observed object is supplemented by direct or introspective knowledge of one's own person.

The importance of this coexistence of objective and introspective observation in psychology cannot be stressed enough, not only because it is the basic difference between physical and psychological science but also because it is the only advantage of psychological observation over the physical research, which, on the other hand, has a great number of advantages, the greatest of which is the possibility of experimentation. All

psychological methods which fail to recognize and exploit this one advantage of psychological examination must necessarily have a limited value in the investigation of human personality. Experimental psychology and behaviorism have imitated the methods of experimental science and have, therefore, either neglected to use and develop the natural faculty of understanding other persons' mental processes or, as in the case of behaviorism, have specifically refused to use this faculty. The pre-scientific man interpreted even inanimate nature psychologically and saw the wrath of God behind thunder and punishment behind lightning. Behaviorism makes exactly the opposite error and refuses to analyze the psychic background even of living beings. Animism attributed personality to inanimate nature, but behaviorism wishes to rob even human beings of their personality. It is both an amusing and depressing sight to observe how behaviorism stubbornly deprives itself of one source of knowledge and restricts itself to the observation of the so-called external behavior. Are not words also objective facts, and when you hear

words how can you prevent them from conveying knowledge of another's psychic processes?

I admit that this common sense understanding of other individuals' mental situations is an unreliable method. But is not the task of every science to improve on natural faculties of observation? Is not unaided optical observation also unreliable? Was it not necessary to add to it by scales and magnifying pointers of physical instruments and microscopes?

Sources of Error in Psychological Observation

I THINK it is time now to describe more concretely what I mean by the natural faculty of understanding another person's mental condition.

You see a common soldier attack an officer and ask him why he did it. He tells you how his superior treated him unjustly for a long time and continually humiliated him until finally he lost control of himself. Then you understand his position because every one has experienced similar feelings. When you say, therefore, that the soldier attacked his superior because the latter

treated him unjustly and that finally the soldier's embitterment became stronger than his fear of punishment, you have a causal theory of his behavior which contains even a plausible quantitative judgment. As much understanding as this can be attained by common sense, which is a natural faculty comparable to our visual and acoustic faculties except that it is much more complex. This faculty of psychological understanding employs the various forms of sense perception and in addition the introspective knowledge of one's own emotions which one uses through identification in the understanding of others. This faculty, which is possessed in varying degrees by every one, is the basis of psychoanalysis, just as the optic and acoustic perceptions are the basis of physical experimentation. But science begins with the refinement and development of these everyday methods and faculties. It is obvious that common sense in psychology is a somewhat unreliable method. There are in it several sources of error. The *first* and most important is that—referring again to our simple example—the common soldier who tells you his story has no reason for telling you all his motives

in attacking his superior. He will give you a story which puts him in a good light. You may, if you are an expert in human nature—what in Germany they call a good *Menschenkenner*—guess his real motives and discount his distortions, but you have no evidence as to whether you are right or not.

A *second* source of error is that even if the soldier wanted to describe to you the actual mental condition in which he acted he is unable to do so because he does not know himself all of his motives. He deceives not only you but also himself, and by his story he tries to put himself in a good light not only in your eyes but also in his own. In mentioning this second source of error, however, I am referring to one of the basic findings of psychoanalysis, that is, the fact of repression, which is a dynamic tendency to keep out of consciousness desires and motives which would disturb the harmony of the conscious ego and disturb the good opinion which we like to have of ourselves.

A *third* possibility of error is that the soldier may be so different from you in his psychological make-up that you cannot understand his motives.

The possibility of identification is contingent on a similarity between observer and observed. This similarity always exists to some degree, since both observer and observed are human beings, but differences of sex, race, nationality, social class, and so forth diminish this similarity and bring into play new sources of error. Men understand each other better than they do women, and women understand each other better than they do men. We understand people of a Western civilization better than we do Orientals. The greater the difference between two minds, the greater the difficulty in understanding.

The difficulties of adults in understanding either young children and savages or psychotics and neurotics have the same ground, viz. that their mental processes are different from the mental processes of normal adults and belong to a more primitive level of mental development.

Finally, a *fourth* source of error is that the observer himself has, as it were, psychological blind spots due to his own repressions. He has motives which he excludes from his own consciousness and does not want to admit even to himself and he will not, therefore, be able to detect these in other

persons. Again, one requirement of psychological understanding, the introspective knowledge of one's own mind, is often lacking in untrained observation because in certain situations this introspective knowledge is blocked by the repression of one's own motives. The dynamic importance of one's own repressions as an obstacle in understanding mentality of others can be appreciated only if we realize that the uniformity and harmony of our conscious ego are guaranteed solely by these repressions. To become an adult it is necessary to forget the infantile way of thinking. The attraction of this infantile form of mental life is great since it is subject in a much higher degree to the pleasure principle than adult mentality, which has had to adjust itself to reality. It is characteristic of infantile mental life that it does not take into consideration objective facts which resist subjective wishes and needs. The recognition of a strange and by no means always benign external reality is the problem which the child has to solve in his later development. The most important means of overcoming the infantile form of thinking and infantile wishes and tendencies is repression, through

which the ego banishes the disturbing remnants of his infantile existence. Through repression these infantile remnants become unconscious and form the unconscious part of the personality. The special difficulty in understanding children, savages and the insane is thus based not only on the differences between their mentality and ours but also on a mental force within ourselves which prevents us from understanding them—I mean repression. To be a normal adult, the primitive part of one's personality must be forgotten or rather overcome, and therefore the primitive mental processes of others and one's own dreams which are manifestations of an infantile personality are difficult to comprehend. In the investigation of mental pathology, science has to overcome the subjective difficulty inherent in the face of repression.

I admit that the enumeration of the many sources of error which have been classified under these four categories is likely to encourage skepticism of the possibility of any scientific psychology. Some of these difficulties seem simply unsurmountable and sufficiently explain why psychology failed for so long a time to find a method

capable of eliminating or diminishing all these types of errors. Psychology, therefore, has not been a science, but the privilege of a few geniuses, the great *Menschenkenner,* authors, novelists and dramatists. Only these have been able to overcome, at least to some degree, most of the difficulties in understanding other persons' real motives in spite of the human tendency to deceive oneself as well as others, and in spite of the differences of age, race and sex. Geniuses are able to do this because the fourth source of error, their own repressions, is less developed than in others. Weak repressions are just what make some people better *Menschenkenner* than others, for in knowing their own personality, they are better able to understand others.

Elimination of the Sources of Error

CERTAIN methodological discoveries have made it possible for psychology to become a science of personality. That every scientific development follows methodological discoveries and innovations is well known. Anatomy began with the

introduction of dissection, histology with the microscope, bacteriology with methods of growing cultures. Psychology, as an empirical science of personality, began with the discovery of the method of free association by Freud.

I do not maintain that all four sources of error are entirely eliminated by the method of free association, but they are reduced to such a considerable degree that the requirements of an objective science are met. The patient is requested to report everything that occurs to him during the analytic session. He is asked to verbalize everything that occurs to him in the original sequence and form without any modification or omission. He is asked to assume a passive attitude toward his own trains of thought; in other words, to eliminate all conscious control over his mental processes to which he gives free rein and merely report them. This simple procedure seems at first to be a rather trivial device and it is not so easy to appreciate its value in research, but it is no less true that the methods of percussion and auscultation appear unpretentious and trivial, and it is only the interpretation of the small

acoustic deviations that make them so important for medicine.

The first source of error, namely, the individual's lack of interest in giving a full account of his mental state, is eliminated in psychoanalysis by the fact that the subject is a patient. Only a sick and suffering person who hopes for a cure of his symptoms by following the physician's prescriptions will be willing to coöperate and give such an intimate insight into his personality as is required by the method of free association. In yielding to spontaneous trains of thought, ideas soon crop up which are usually put aside and forced from the focus of attention. While one yields to this uncontrolled manner of thinking in eliminating or at least diminishing the conscious control, an unknown part of the personality becomes manifest and all kinds of disagreeable and irrational notions and imagery appear which controlled thinking interrupts and blocks before they come to full clarity. In the analysis the patient gradually learns to overcome his natural reluctance to abandoning the conventional façade which people habitually turn toward one another, and becomes entirely frank, displaying

himself in a kind of mental nudity not only to the analyst but, what is equally novel, to himself. From this point of view it may be claimed that the patient's desire to be cured supplies an indispensable factor in an efficient psychological investigation, for it alone guarantees a willingness for unreserved self-revelation.

The only other situation which meets this requirement is a didactic analysis in which a student of analysis subjects himself to the procedure in order to learn the technique of analysis. In this case it is not the hope of being freed from disease but the wish to learn the method by studying oneself that guarantees frankness. Without coöperation between the observer and the observed, psychology is impossible. In physics, the willingness of inanimate objects to be studied is not necessary, but in psychology the analyst is absolutely dependent on this willingness.

The second source of error, namely, that the observed individual on account of his repressions is unable to give a full report of his own mental state, has also been solved by means of the analytic technique, which serves to eliminate the conscious control of mental processes. Spontane-

ous trains of thought are in a much higher degree subject to the repressed mental forces than ordinary thinking. Such trains of association are no longer determined by conscious processes and, therefore, display a more irrational character, similar to the day-dreams or states of drowsiness. Long and patient observation of uncontrolled free associations has led to the development of a technique of interpretation which allows the psychoanalyst to reconstruct the unconscious tendencies which determine the sequence and content of these spontaneous trains of thought. In this way he is able to obtain a deeper insight into the make-up of the personality and to understand motives and emotional connections which are normally covered up by the controlling and selective functions of the conscious ego. Thus the second source of error, the inability of the patient to give a full account of his motives, is eliminated.

The third source of error was a subjective one, viz. the difference between the observer and the observed. In some cases identification is almost impossible, as, for example, in the case of the mentally sick who revert to primitive infantile

forms of mental activity. The length of an analysis, covering daily interviews over a period of months, is the only means by which this difficulty can be overcome. If you travel in a foreign country you are at first quite unable to understand the mentality of the inhabitants, even though you may understand their language. Their facial expressions and their reaction patterns are unfamiliar. But in time you learn their reactions without being able to tell how and why, and you gradually become able to orient yourself psychologically. The same thing happens in the course of a long psychoanalysis. Even a peculiar neurotic personality becomes familiar through prolonged and patient observation.

Finally, the fourth source of error, due to the blind spots of the observer caused by his own repressions, must also be eliminated, if psychoanalysis is to be regarded as a reliable form of investigation. The means of overcoming this difficulty is the preparation of the observer through his own analysis, in which he overcomes his repressions, learns to understand the unconscious part of his personality, and understands manifestations in others to which he was previously

blind. I feel that I must explain this difficulty in a more concrete way by referring again to the example of the soldier who attacked his superior. Assume that the observer is a person of a basically tyrannical nature who, however, will not admit his tyrannical propensities even to himself and tries to explain away his own aggressive and domineering tendencies. Such a person, observing the scene between the soldier and his superior, will be inclined to overlook the superior's brutality or tyranny and will tend to blame the soldier for the officer's aggressions. He will have great difficulty in understanding the point of view of the common soldier and in justifying his resentment, and will tend to see in him a rebel and thus justify the attitude of the tyrannical officer, with whom he can more easily identify himself. He wants to keep his own tyrannical impulses concealed from himself and, at the same time, to give vent to them. He is, therefore, blind to similar tendencies in others, for in recognizing them he runs the danger of being forced to admit them in himself.

The didactic analysis which every trained analyst undergoes serves to overcome this subjec-

tive source of error. It increases the knowledge of the analyst's own personality and enables him to allow for the disturbing influence of his own character. The International Psychoanalytic Association has therefore for many years made it obligatory on every psychoanalyst to undergo an analysis himself before undertaking to analyze others. Just as astronomical observation must discount subjective error which is called the "personal equation," so psychoanalytic observation is impossible without knowing the peculiarities of one's own personality which may interfere with an objective psychological observation.

There are, therefore, four sources of error inherent in ordinary psychological observation which systematic psychoanalytic technique avoids in four ways: The unwillingness of the patient to disclose himself to the analyst is offset by his desire to be cured; the inability of the individual to give a full account of his mental state is overcome by the method of free association; the difference between observer and observed is made less effective by the long and systematically repeated observation; and the blind spots of the observer are helped by the didactic analysis. By

these four devices, psychoanalysis has succeeded in refining the ordinary faculty of understanding the mental processes of others and in developing it into a scientific method which can be learned by almost any serious student and controlled objectively.

The efficiency of this method has been best proved by the fact that insight has been gained into cases in which ordinary understanding and even the genius of the great authors has entirely failed, the cases of psychosis and psychoneurosis. The seemingly unintelligible irrational and senseless behavior of the insane, the strangeness and irrationality of the psychoneurotic symptoms, can be psychologically explained and translated into intelligible language.

Psychoanalysis as a Therapeutic Method

THE importance of the desire to be cured which, except for the didactic analysis, is the only effective condition for detailed psychological research, is responsible for a unique feature of psychoanalysis: I mean the coincidence of therapy

and research. In psychoanalysis research takes place during the treatment, or, in other words, the methods of the treatment and research coincide.

After Freud had learned that neurotic symptoms are dynamic manifestations of repressed mental tendencies which the patient excludes from his consciousness and which return into consciousness in a disguised form as unintelligible symptoms, he realized that the way to free the patient from his symptoms was to make conscious the underlying repressed tendencies. In this way psychoanalysis extends the conscious ego's field of activity to portions of the personality which are unconscious before the treatment. The patient, as a result of the emotional experiences in the analysis, becomes more conscious of himself and more able to control his mental energies than before. He becomes able, also, to master those forces which were expressed in neurotic symptoms and to use them for normal activities. In this way he is cured. The aim of therapy and research is the same, a more complete knowledge of the personality; and this is unique in the field of medicine. In all other forms of medical treat-

ment the patient plays a passive rôle. It is not only not necessary to initiate the patient into the details and mechanisms of his disease, but it would in most cases be disadvantageous to do so. In psychoanalysis, however, the patient's knowledge of the repressed mental contents for his symptoms evinced itself as *the* therapeutic agent. This fortunate coincidence of therapeutic method with that of scientific investigation is responsible for the fact that therapy is not only one approach to scientific knowledge but the very source of it.

The psychoanalytic technique which I have lauded as the great methodological invention which has made a science out of the research of personality and an etiologic treatment out of psychotherapy may appear too simple and trivial to be hailed as responsible for the development of a new science. It may be asked: What is the great novelty of psychoanalysis? It takes suitable subjects who are willing to offer a view of their personalities and gives them simple technical instructions on how to give up the conscious control of their trains of association. The method is simple as every scientific method is, and the secret of its efficiency is that it is adjusted exactly to

the nature of the subject matter of the investigation. The whole development of scientific medicine in the modern age is also due to the simple resolution, instead of speculating about the human body, to look at it, dissect it and investigate all the details of its construction. The psychoanalyst listens in the same way as the anatomist looks, and this analogy goes really deeper than it may seem. Pre-anatomic medicine consisted in vague generalizations and speculative concepts similar to those of the pre-Freudian psychology. Psychologists spoke about emotions, will, ideas, perceptions and apperceptions, but were not interested in the actual details of the mental content. The introduction of dissection was not easy and encountered all the emotional prejudices that the dissection of personality has aroused in our own day. If one reads the writings of some of Freud's critics in Germany and replaces the word "personality" or "mind" by the word "body," the same arguments which were advanced against the dissection of the body in the sixteenth and seventeenth centuries reappear. Psychoanalysis is a sacrilege, it degrades the mind, it drags down into the mud our highest mental possessions. One

easily recognizes in these sentences the style of those who opposed dissection of the body. Anatomy and physiology caused great disillusionment, for scientists did not find any place for the spirit. Psychoanalysis has also caused disillusionment. The dissection of the mind reduces the complexity of personality with all of its highest strivings and intimate vibrations to a system of dynamic forces to which, from the scientific viewpoint, the categories of good and evil, high and low, beautiful and hideous, are inapplicable, though they naturally retain their significance in practical life.

I would give a false impression if I stressed only the simplicity of the psychoanalytic method. It is simple only in its general principle; that one has to listen to what the patient says. The scientific estimate of the material, however, is by no means simple. An elaborate technique of interpretation, based on long and painstaking comparisons, makes the learning of this method just as difficult as the use of the microscope. It requires long experience and a training of the complex faculty of understanding the mentality of others. Training in the method of interpretation

itself can be compared with learning a new language. Dreams and all other manifestations of the unconscious mind speak a different language from that of the conscious mind. It is a language of pictures and its relation to conscious thinking is similar to the relation of ancient picture writing to modern alphabets.

Conclusion

I SEE the significance of psychoanalysis for medicine in the following two accomplishments: 1. With the help of a technique specifically adapted to the nature of psychic phenomena, it has developed a consistent and empirically founded theory of the personality, fit to serve as a basis for the understanding and treatment of mental disturbances. 2. It has given a concrete content to the philosophic postulate that living beings are psychobiological entities, by investigating in detail the interrelation of physiological and psychological processes. The greater part of these investigations must, however, be left to the future for completion.

CHAPTER II

THE PRESENT STATUS OF PSYCHOANALYSIS AS A THEORETICAL AND THERAPEUTIC SYSTEM

II. THE PRESENT STATUS OF PSYCHOANALYSIS AS A THEORETICAL AND THERAPEUTIC SYSTEM

IN the last three hundred years, several wholly new sciences have been created. Modern chemistry is hardly two hundred years old, and experimental biology and scientific medicine considerably less. The development of psychoanalysis in the last forty years from a special therapeutic device to a science of personality, with well defined and established methods of research is, therefore, an unusual cultural phenomenon. It is no wonder that in this short period the scientific world has not yet had time to assimilate this youngest of the scientific disciplines. Its relative novelty explains the widely different estimates recently made of it, some maintaining that it is one of the most important products of modern thinking, others wholly denying its sci-

entific nature and prophesying its speedy disappearance.

How the first groping therapeutic attempts of Freud and Breuer developed into a consistent and empirical theory of personality is itself a fascinating question which deserves to be investigated. It is, however, not unusual in the history of sciences as of other human endeavor that they lead to quite other than the expected results. I do not need to give examples of this in this continent, the very discovery of which is a classical example of such an unexpected result. The unexpectedly discovered territory in psychoanalysis is the knowledge of the structure of human personality.

The Theory of the Cathartic Hypnosis

THE richness of theoretical results yielded by the psychoanalytic treatment of psychoneurotics is explained by the fact that in psychoanalysis the method of therapy and research is the same. Even when Freud still used the method of cathartic hypnosis, the reconstruction of the history of

neurotic symptoms was the crucial element in therapy. Freud stated this fact in one of his very early writings in the formula that the psychoneurotic patient is suffering from reminiscences. The first result of observation of the mechanism of symptom-formation was that in hypnosis patients were able to remember certain events in their lives which they had entirely forgotten. This recollection in hypnosis, however, was not simple recollection, but a dramatic repetition of forgotten situations. These pathogenetic situations had been forgotten on account of their overwhelming nature. Freud and Breuer called such experiences "traumatic situations." A characteristic feature of such traumatic situations is that the patient cannot give expression to certain emotions. The dramatically expressed emotions which became manifest in hypnosis were just those which the patient had repressed in the traumatic situation. The first theoretical formulation of this was that the neurotic symptom is the dynamic equivalent of those emotions which had not been adequately expressed at the time when they arose. After these forgotten events had been remembered and the accompanying emotions

found abreaction in hypnosis, the symptoms disappeared. They disappeared because they had lost their dynamic foundation. Freud's second logical, really inevitable conclusion was that the reappearance of such forgotten emotional situations in hypnosis is due to the elimination of consciousness during hypnosis, so that the dynamic force responsible for the forgetting of certain experiences must be inherent in the particular state of consciousness. Freud expressed his conclusions in the following way: In certain situations—the so-called traumatic situations—the psychoneurotic patient was unable to face certain unbearable emotions and was forced to exclude them from his consciousness. These emotions, excluded from consciousness, found no adequate expression and relief and so maintained a permanent tension in the personality which the psychoneurotic symptoms are an attempt to relieve.

Another assumption made by this theory and well established by everyday observation was that every emotion has the tendency to be released by certain motor innervations, such as weeping, laughter, gestures, facial expression and more especially by their expression in

speech. These reliefs are evidently possible only if the emotion is conscious; so that excluded from consciousness it is at the same time deprived of its normal and adequate expression. Hysterical symptoms were, according to this view, unusual motor innervations produced by unconscious, i.e. repressed mental tendencies, which just on account of being repressed were excluded from normal expression. Later, Freud, and more especially his follower, Ferenczi, drew the bold conclusion, again based on detailed observation, that practically all parts and functions of the body can be used to express emotion. The use of the striated muscles of the face and extremities is only one special case in which an idea or an emotion influences the function of organs. Theoretically, however, all organs can be used to express emotions or to release psychic tension. The anatomical and physiological basis of these innervations is well established. Through the peripheral and vegetative nervous system all portions of the body are directly or indirectly connected with the cortex. Psychogenic disturbances of the stomach or heart are no more mys-

tical than the stimulation of the lachrymal sac by melancholy thoughts.

Hysterical symptoms, in the light of these views, are unusual expressions of mental tensions, unusual because the organs influenced are, as a rule, not used for emotional expression or, at least, not in the same way. A close investigation has even shown that the organic expressions which at first seemed unusual are not so exceptional, nor are they present only in pathological cases, but that under the influence of a strong emotion, like fear, the heart, the blood vessels, the peristaltic movement of the intestines, the secretion of the skin glands, and the constrictor pupillae, all participate.

The only peculiarity of hysterical innervation is not the mere occurrence of unusual emotional expressions, but their permanency and the apparent absence of the accompanying emotion. Thus the only logical conclusion that could be drawn was that emotions excluded from consciousness are likely to create a permanent tension, and as a result of this tension, to occasion permanent or at least recurring disturbances of certain organ functions. In hysteria the under-

lying emotion disappears and gives place to its dynamic substitute, the symptom. The therapeutic idea was that if these repressed emotions could be brought to natural expression, they would cease seeking unusual outlet in pathological innervations of the organs. The natural expression of emotion is possible only through consciousness, so that the goal of therapy became the attempt to bring into consciousness repressed mental material.

Here can be seen the first point at which therapy and research converge. Psychological research aims to discover psychological connections and attempts to understand the psychological make-up of the personality, and the aim of psychoanalytic therapy is similarly to bring into consciousness unconscious mental connections, by increasing the patient's insight into his own mental processes. Thus even at the beginning of his psychotherapeutic work, during the period of coöperation with Breuer, Freud recognized that hysteria can only be cured by knowledge, and not by the physician's alone, but by the patient's knowledge of his own personality. This was the first step, historically, toward this unique mode

of therapy, in which the cure is based upon the patient's knowledge of himself.

At the time, however, when the method of cathartic hypnosis was in use, this principle of bringing into consciousness unconscious material was not yet at all effectively realized, for the recollections of which the patient is capable under hypnosis do not belong to his conscious mental possessions. On awaking from hypnosis he is usually unaware of what has happened during the hypnosis. Such hypnotic recollection does not eliminate the cause of amnesia, viz. the resistance of the conscious personality to facing the unbearable material which has been repressed. Furthermore, experience has shown that the abreaction of emotions during hypnosis does not result, in most cases, in a permanent cure; it means rather a temporary relief from accumulated and repressed mental tension. As long as the conscious personality is not able to face the repressed tendencies, the same emotional setting again becomes repressed and likely to produce new hysterical dysfunctions. Hypnosis can be considered as an ingenious trick which, by excluding the conscious personality, circumvents its resistance

against certain repressed material. It is easy to understand that the next logical step must have been the attempt not to circumvent but actually to overcome the resistance of the conscious personality against the repressed material, to induce the personality to face the tendencies previously excluded from consciousness which are the dynamic cause of the symptoms.

At the time when Freud began his experiments in substituting another psychotherapeutic method for hypnosis, all these notions were not clearly formulated. It was by no means mere logic which led Freud to find another method but his own creative genius. It is hard to reconstruct precisely all the motives which induced him to give up hypnotic treatment and I do not think that even he is able fully to account for it. The reasons stated in his writings do not appear entirely satisfactory. One reason that not every patient is susceptible to hypnosis is without doubt decisive, but also other more theoretical considerations must have influenced him to experiment with other methods. It soon became evident that the forgotten "traumatic" experience was not, in many cases, such a violent or extraordinary event as

could have explained its pathogenic significance, so that the objective nature of the traumatic experience was by no means sufficient to explain its effect. Hypnotic experiments often revealed situations which seemed entirely harmless. For example, the famous patient of Breuer, on whom the very first cathartic observations were made, suffered among many other symptoms from hydrophobia. She would not drink water, but would quench her thirst only with melons and other fruits. During the hypnotic treatment one day she began to talk about her English governess whom she disliked very much and remembered that once, on entering the governess's room, a little dog was drinking water from a glass. Out of politeness, she suppressed her anger and did not say anything, but during the hypnotic session she was able both to remember the scene and to express the annoyance which at the time she had kept back. After giving full vent to her hostility to the governess, she asked for water and drank a good deal of it.

It is evident that the traumatic effect of this little scene in which the patient's hydrophobia had been originated cannot be explained by the

nature of the scene itself. The mere sight of a dog drinking out of a glass, without assuming a special sensitiveness of the patient to the scene, cannot explain its pathogenic effect. Evidently the symptom must have had some kind of historical background, and there must have been other earlier experiences which made the patient peculiarly responsive to this intrinsically harmless situation. As a matter of fact, neither Freud nor Breuer drew this conclusion clearly at the time of their coöperation, for traditional views of the French neurological school hindered their perception. In the beginning they accepted Charcot's vague concept of a special mental situation which he called "condition seconde" or "hypnoid" as responsible for the traumatic effect of certain situations. According to this theory some patients under violent emotions were apt to fall into peculiar states of split consciousness (hypnoid), in which they were especially sensitive to traumatic experiences, even if these were not especially violent, nor capable of exerting any effect on normal persons. This pathological inclination for falling into hypnoid states, Freud and Breuer, at the beginning following Charcot's

theory, ascribed to hereditary factors. Freud, however, never was really satisfied with this rather dogmatic explanation. In seeking a more satisfactory explanation, he observed that in hypnosis the violent abreactions of emotions during the recollection of traumatic situations were frequently not followed by a disappearance of the symptom. More hypnotic sessions were necessary in which other traumatic experiences of an earlier date came to abreaction. The symptom was not determined, as was assumed at the beginning, by *one* but by a whole chain of experiences, which regularly went back to puberty and quite monotonously had some connection with the sexual experiences or emotions of adolescence. It became evident that every symptom had a long and complicated historical background, and that hypnosis could only reveal a limited section of the past and did not give a complete picture of the patient's history. This conclusion furnished another motive which stimulated Freud to try other methods.

The problem which Freud faced at this stage was to force the patient to remember traumatic and consequently forgotten periods of his life

without the exclusion of consciousness in hypnosis. Under the influence of Lieubeault's and Bernheim's experiments on suggestion in waking states, Freud tried to force his patients by means of suggestion to recall traumatic events in their lives. These suggestions, however, were no longer made in hypnosis, but to the fully conscious patient.

The Discovery of the Method of Free Association

After a short period of experiments with suggestion between 1890 and 1895, Freud definitely gave up hypnosis and suggestion and discovered the method of free association.

Whereas hypnosis and suggestion can be regarded as a frontal attack against the patient's resistance to letting repressed mental content enter consciousness, the new technique can be compared to a flank attack. In this method the significant factor is the self-betraying tendency of the unconscious material, which seeks expression but is inhibited by repressing counter-forces. Once the patient abandons the conscious control

and direction of his ideas, the train of the free spontaneous associations is guided more by the repressed material than by conscious motives. The complete elimination of consciousness effected in hypnosis was replaced in this method by partial elimination, which dispenses only with the controlling forces of conscious personality.

This technique threw a new light on the origin of symptoms. It now became evident that the traumatic experience was only a precipitating factor and that it derived its traumatic quality from earlier experience. The new method was able to penetrate further, into the early infantile period, and proved that the traumatic experiences of later life derived their traumatic quality from their intimate connection with similar emotional situations in early childhood. The uncontrolled trains of thought revealed to the observer a fascinating interplay of two dynamic tendencies: to *express* and to *repress* some mental content of which the patient was unaware. This double tendency to express and conceal: the impulse to remember and confess something accompanied by the opposed inclination to keep the same material out of consciousness resulted in sequences

of associations which led the observer to suspect covert allusions to a hidden content which the associations now approached, now avoided. This free association when extended over a sufficiently long period brought the patient back to forgotten periods of his life. Sometimes it resulted in the recollection of forgotten events as was the case in hypnosis, but even in the cases where distinct recollections were not abundant, the trains of association by increasingly clear allusions permitted a reliable reconstruction of the forgotten phases of the past. More important than this reconstruction of events was the fact that during the process of free association the unconscious emotions and tendencies which had been repressed at certain times in the past came to the surface. The emotional abreaction in free association is essentially similar to the abreaction under hypnosis, the only difference being that under hypnosis it is like an explosion concentrated in a short time, while in free association it extends over a long period. The same amount of emotion which comes to abreaction in a few minutes under hypnosis is dispersed in free associations over many months. The advantage of protracted emo-

tional abreaction is that the patient's conscious ego is much better able to digest these emotions and to relate them with the rest of the mental life. This process of "working up" repressed emotions, which is a kind of mental digestion, is the most valuable therapeutic factor, because it means a permanent change in the total personality. The hypnotic abreaction was a kind of explosion in a state when consciousness was eliminated so that the principal aim of therapy, to make the patient able to face and to control these emotions, could not be realized.

With the introduction of this new method, psychoanalytic treatment became the coöperation between physician and patient in extending the activity of the conscious personality to such parts of the mental apparatus as had previously been unconscious. The chief practical and theoretical problem was concentrated in the attempt to find the causes of repression. Only after these were known was it possible to proceed deliberately to change the personality in a way to make repression superfluous. Here again a problem in therapy stimulated research into the dynamic structure of personality, and psychoanalytic

theory and therapy in traditionally intimate connection were directed toward the understanding and overcoming of repressions. In order to give a clear picture of the later development of psychoanalysis, I must summarize briefly the first theoretical formulations of the experiences gained with the method of free association.

The Theory of Repression

THE human personality is not a homogeneous entity; the conscious mental processes are only a part of the mental life, for there are also unconscious mental processes which are excluded from consciousness. The first assumption was that the mental content excluded from consciousness was of a kind, the recognition of which would cause an unbearable conflict. In other words, everything contradictory to the ruling tendencies of the conscious personality, to its wishes, longings and ideals, and everything which could disturb the good opinion one likes to have of oneself is apt to be repressed. The homogeneity of the entity which we call and feel our actual ego is

due to the dynamic fact of repression which excludes everything disturbing the harmony of this conscious part of the total personality. The first fundamental concept was a *topic,* and at the same time a *dynamic* one, the distinction between the conscious ego and the unconscious.

The second important discovery was that repression though able to prevent some mental forces from becoming conscious, does not destroy the dynamic power of these repressed tendencies. On the contrary, the unconscious tendencies are able to influence overt behavior and at the same time to find special outlets in neurotic and psychotic symptoms and, more mildly, in common mistakes of speech and behavior, in dreams and day-dreams, in which repressed tendencies return to consciousness in a distorted form. Even the conscious and apparently rational behavior of normal persons is, to a certain degree, influenced by rationalized unconscious motives. Thus rational motives are often invented for behavior which is fundamentally determined by unconscious motives. The difference between normalcy and neurosis is only a quantitative difference in the extent to which unconscious tendencies domi-

nate and determine behavior. Neurotic symptoms are eruptions of repressed tendencies, a kind of revolution of the repressed parts of personality which, in neurotics, apparently have a greater intensity. This notion conveys the uncanny impression that every one is walking on the volcano of his unconscious personality, a statement which tries the conceited twentieth century which has placed so high an estimate on the sovereignty of the rational ego and furnishes a new reason for turning aside from the unpleasant truth discovered by psychoanalysis.

The Discovery of Infantile Sexuality

On investigating the conditions of repression, the first striking fact was the particular sensitiveness of the conscious ego to certain sexual tendencies. Investigation uncovered a most exciting drama in the depths of the personality—a drama in which the civilized man is peculiarly involved—and in which the principal rôles are taken by the original biological impulse for the preservation of the race and the social restric-

tions placed by society upon this impulse. While the instinct for self-preservation is involved chiefly in conflict with external reality, the sexual instinct, as a consequence of social development, has to fight against inner restrictions within the personality. Once his interest was focused upon this typical repression of the sexual instinct, Freud made the discovery which immediately aroused general prejudice and animosity, viz., the discovery of infantile sexuality.

Without knowledge of repression it is entirely impossible to understand how mankind was able to achieve this masterpiece of blindness and self-deception in overlooking the overt sexuality of the infant. Freud was indeed justified in appreciating so highly the observations of the Hungarian pediatrist, Lindner, who—a singular phenomenon—as early as 1879 recognized the sexual nature of the new-born infant's thumb-sucking. In the last thirty years, the sexual manifestations of the child have become a field for the most diligent observation, and many of the former opponents of infantile sexuality are today busy describing new sexual manifestations in the child.

Freud, however, was led to the discovery of

infantile sexuality in a more indirect way. Having introduced the method of free association, he made the unexpected observation that neurotic patients following their spontaneous trains of thought for a sufficient length of time were led with astonishing regularity to early experiences of a distinctly sexual nature. The first theoretical estimate of this observation, however, was shown later to be erroneous. In the majority of cases, this early sexuality reflected in the patient's memories proved to be typical phantasies of childhood rather than real events and experiences. The notorious theory of the "infantile sexual trauma" had to be abandoned, and Freud in this case, as in many others, was free to admit his error and revise his older views. The fact which remained valid was that the child already in the very earliest period of his life is involved in certain typical emotions of a sexual nature which his personality is not able to face and relieve. Thus the theory of the early sexual trauma, although erroneous, led to a knowledge of early emotional conflicts of the child by calling attention to his early instinctual life.

The next fundamental statement which Freud

made was that the repressions of most importance for later development must have grown out of the emotional conflicts of early childhood. It cannot be denied that in the explanation of these early repressions, Freud at first one-sidedly emphasized the early sexual striving of the child, although in the detection of the Œdipus complex he recognized the basic importance of hostile tendencies directed against the parent of the same sex. The full theoretical appreciation of the significance of these hostile or destructive tendencies, however, came much later, owing to the fact that the theory of the instincts has always been the most speculative part of the psychoanalytical theory and consequently subject to the greatest changes.

The Theory of Instincts

THE early distinction between the sexual libido and the instinct for self-preservation—also called "ego-instinct"—was merely descriptive, comparable to the first notions of electricity and gravity, which were not concerned with the ultimate na-

ture of the force involved but merely tried to describe its manifestations. The distinction between the instinct for self-preservation and the sexual instinct, however, proved insufficient to give a theoretical explanation of the observed facts.

In its earliest manifestations in *oral* and *anal* eroticism, the libido is intimately connected with the functions of nutrition and excretion, which are usually considered manifestations of the instinct for self-preservation. But even in its sublime manifestation in love, the libido at an early period takes its own person as an object in a kind of self-love which Freud called "Narcissism." Only later, after the individual's system is fully saturated with libido, does the differentiation between the aims of self-preservation and those of race preservation take place and the libido fastens upon others as objects of its attachment.[1] Even in adult life, however, the sexual life may regress

[1] Bernard Shaw, in his "Heartbreak House," expresses the libido theory, the concept of Narcissism, and sublimation in a simple and convincing way The coincidence between the Freudian concept and Shaw's philosophy, which he gives in the words of Captain Shotover, is remarkable.

Captain Shotover says: "A man's interest in the world is only the overflow from his interest in himself. When you are a child your vessel is not yet full, so you care for nothing but your own

in perversions to its early modes of expression.

It should be clear from this survey that at first there was little room in Freud's theory of instincts for the destructive instinctual tendencies. Broadly speaking, hatred and destruction were considered as manifestations of the instinct for self-preservation, also called ego-instinct, which was supposed to be connected with erotic factors in the form of sadism. Up to 1920 the libido-theory retained this looseness of expression and not until 1920 did Freud clarify the matter by distinguishing between two basic biological instincts—the *erotic* and the *destructive*. According to this theory, the erotic drive is a binding force with a tendency to build up higher biological systems and its fundamental manifestation is the anabolic process of metabolism. The destructive tendency, on the contrary, is a separating force expressed biologically in the chemical process of katabolism. In agreement with biological ideas, Freud assumed that in their psychological manifestations these two tendencies were always mixed.

affairs. When you grow up, your vessel overflows; and you are a politician, a philosopher, or an explorer and adventurer. In old age the vessel dries up: there is no overflow: you are a child again."

The actually observed psychological processes are supposed to result from the mixture in varying proportions of these two basic tendencies. This concept, although unquestionably highly speculative, is in better accord with the observed facts than the old distinction between ego-instinct and sexual instinct, which was not able to describe and differentiate clearly enough a group of mental antagonists such as love and hatred and the creative and destructive strivings. The older distinction between self-preservative and race-preservative tendencies described not so much different qualities of two separate instincts as manifestations of the same mental force directed toward different objects. The erotic instinct in its narcissistic expressions has a function in self-preservation and, when directed against objects, in race-preservation. The distinction between the destructive and erotic tendencies, however, is a distinction of the basic qualities of the instincts. Such a distinction was necessary to describe so fundamentally different psychological phenomena as love and hate, or the biological opposites, reproduction and death.

The Œdipus Complex

We may now disregard in what follows these speculative and by no means rigid or necessarily complete views as to the nature and qualities of the instincts. The statement of fact about the early emotional conflicts of the child have been fully corroborated by further research. Detailed observations have monotonously revealed that psychoneurotic patients remain involved in a strange way throughout their lives in a characteristic struggle between love, jealousy, the sense of inferiority, and a guilty conscience which begins in the Œdipus situation of early childhood. Freud explained the typical amnesia which covers the first six years and only permits isolated and apparently quite insignificant and fragmentary recollections to survive as the result of strong repressions during these early years. These repressions are due to the discrepancy between the intensity of the emotions and the strength of the infantile ego. The infantile ego is not able to assimilate—one might even say digest—the emotions of love and jealousy, and can neither con-

trol nor renounce them, so that the only way left to solve these emotional conflicts is repression, i.e. their elimination from the field of consciousness. A peculiar anachronism is responsible for this discrepancy. The development of the instincts does not run parallel either with mental or genital growth. The child's personality has to face both psycho-sexual tension and aggressive impulses which his mind can neither control nor relieve by genital and muscular activity. This uneven development of the instinctual life on the one hand, and of intellectual and genital capacity on the other, is in the last analysis the basis of the child's emotional conflicts. Childhood is, consequently, the most vulnerable phase of human development. Mistaken educational principles, traumatic experiences of every kind which are apt to increase this conflict, may exert a pathogenic influence upon the whole later life.

After the pathogenic significance of the emotional conflicts of childhood had been corroborated by a vast amount of observation, the dynamic concept of repression could be completed by description of the kind of psychological con-

tent, which was regularly repressed. Feelings of love and hate in the form of jealousy and in the specific relations in which they occur in family life undergo repression, and the infantile repressions form the pattern which, like a conditioned reflex, determines the repressions in later life.

Development of the Ego-Psychology

THE structural and dynamic approach to the actually observed mental processes has in the last ten years undergone a rapid development. From 1921 on we can speak of the evolution of a new analytic ego-psychology. A deeper investigation of the fundamental processes of repression was the starting point of this new development. The central problem became, Which psychic factors are responsible for repression and how does this process take place in detail? It soon became evident that fear is the motive power behind all repression. Characteristic of this fear, however, is the fact that it is by no means a rational or entirely conscious fear of external and actual

danger but an inner fear which appears in consciousness as a guilty conscience. This phenomenon is most satisfactorily described by saying that one part of the personality exhibits fear of another part, which in ordinary language is called conscience, and that repression serves to avert this fear-reaction. In other words, those mental tendencies, wishes, longings, ideas, are excluded from the conscious personality as would arouse self-condemnation if they entered consciousness, for this self-condemnation is associated with fear like that experienced in the face of real danger. The historical investigation of the repressed tendencies has shown that those are apt to arouse a guilt-conflict which at some previous time, usually in infancy, had actually caused the individual pain, parental punishment or contempt. The fear of the parents thus becomes embodied in the fear of one's own conscience. The assumption was inevitable that during development a part of the personality assumes the attitude, opinions, and judgments of persons in authority, usually of the parents, and this embodiment of the parents now assumes the same attitude toward the rest

of the personality as the parents previously manifested toward the child. This process of identification with the parents and the incorporation of their image into the mental apparatus is the process which we usually call adjustment to the social environment. One part of the personality accepts the code of education and becomes a representative of demands of society and this part Freud called the *super-ego*. It is important to realize that not the whole of the personality participates in social adjustment and that even in normal persons there is a steady and permanent tension between the original, nonadjusted, instinctual tendencies, and the restrictive influence of the super-ego.

The existence of the super-ego explains how in every form of civilization there is a self-regulating or self-restrictive force in individuals which is indispensable for social order. If an internal code of law such as the super-ego or, to use the more popular expression, the conscience, were not present, social order could only be secured by assigning to every citizen a policeman to make him conform with accepted social behavior. Social behavior is by no means enforced only by

fear of external punishment; there is also in every adjusted individual a restrictive force, which in the course of development becomes more or less independent of external reinforcement, such as admonition and threats of punishment. On the other hand, it also became evident in the light of psychological analysis that the inner assimilation of social prescriptions is limited to only a few, very fundamental regulations. Without the fear of punishment, the majority of people would behave less socially than they actually do, for the super-ego does not entirely replace real persons in authority.

The only way to test empirically which non-social tendencies are controlled by the internal restricting functions of the super-ego and those which must still be controlled by a police force, would be to make the impossible experiment of abolishing all punishments. A statistical investigation as to what kinds of crime and unsocial behavior increase under these circumstances and what criminal tendencies no longer need external control would furnish a criterion of the degree to which the man of today is essentially adjusted to the requirements of collective life. From psy-

choanalytic experience it could be predicted with some degree of probability that in our present civilization only cannibalism, actual incest, parricide and fratricide would not increase, even if there were no punishment for these crimes in the penal code. These non-social tendencies, though manifest at the beginning of man's development, are repressed in contemporary civilization so successfully, that there is no danger of their actual realization. Cannibalism, for example, no longer needs the special prohibitions necessary in some primitive civilizations, for it is deeply repressed although unquestionably existent at the beginning of every one's development.

Whereas the normal individual is able to domesticate and modify his unsocial, instinctual tendencies, the psychoneurotic remains more firmly fixated to them. The way which the neurotic chooses for the solution of his conflict between repressing and repressed non-adjusted mental forces is a substitution of phantasy for the actual realization of his wishes, though not even in his phantasy can he express directly his non-adjusted tendencies, since the conscious, adjusted portion of his personality denies their

existence. The outcome is a disguised fantastic expression of them in psychoneurotic symptoms.

Furthermore, the investigation of dreams has shown that even in normal persons unconscious remnants of non-social tendencies are at work, for the often unintelligible and senseless dreams of adults are disguised expressions of tendencies rejected by the adjusted part of the personality. Consequently dreams can be considered the neurotic symptoms of normal persons. In any case the dynamic basis of dream-formation is identical with that of neurotic symptom-formation and, in fact, the technique of dream analysis has proven to be the most delicate instrument for the investigation of the dynamic interplay of repressed and repressing mental forces. This microscopic research into symptom- and dream-formation has led to a kind of stereo-psychology, for it has developed a concept of the structure of personality and has reconstructed intrapsychic processes which go on between the structurally differentiated parts of the personality. We can distinguish three structurally differentiated parts of the mental apparatus:

(1) The inherited reservoir of chaotic, instinctual demands which are not yet in harmony with each other nor with the facts of external reality

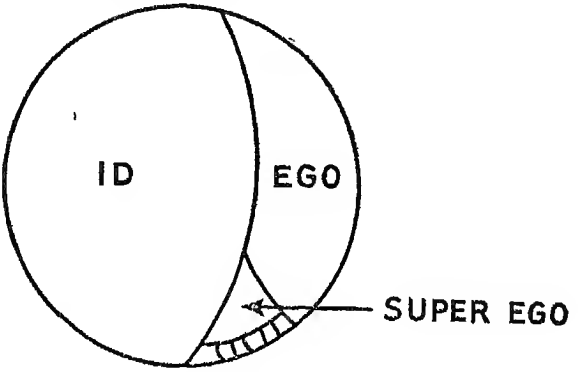

FIG. 1

The shaded portion of the section, which represents the super-ego, expresses the fact that the super-ego in a fully developed personality has lost its connection with external reality It is more or less rigid and has sunk to the depth of the personality. It is consequently to a high degree unconscious.[1]

is called, on account of its impersonal quality, the *id.* (2) The *ego* is the integrating part of the personality which modifies and, by a process of selection and control, brings the original tendencies of the id into harmony excluding those the

[1] In my book, "The Psychoanalysis of the Total Personality," I proposed a distinction between the entirely unconscious super-ego and the conscious ego-ideal. The latter contains those specific values acquired in later life and which are the conscious directing forces of conduct. This distinction was accepted by many psychoanalysts, but it seems to me questionable whether one should

realization of which would occasion conflict with external reality. (3) Finally, the third part of the mental apparatus, the result of the latest adjustment, is the *super-ego* which embodies the code of society. Naturally this code is dependent upon the social environment and differs according to the cultural milieu in which the individual was brought up.

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consider the ego-ideal more closely connected with the super-ego, as its continuation in the consciousness, or more allied to the actual ego. This could be expressed by the following diagram:

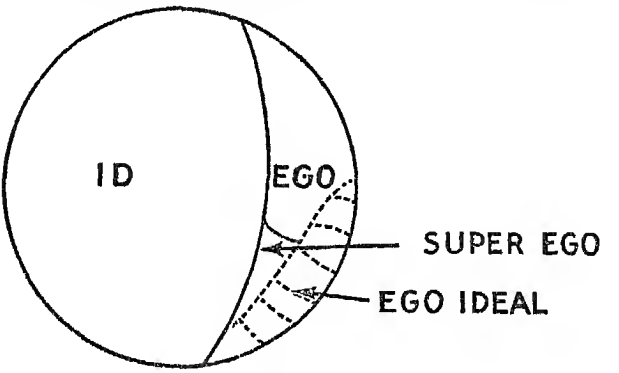


FIG. 2

The dotted line expresses the fact that the ego-ideal is not a completely separate unit, since it is hard to differentiate between conscious values, ideals, guiding principles and the rest of the ego. On the other hand, it is also difficult to make a sharp distinction between the entirely unconscious, almost automatic influences of the super-ego and those more or less conscious ones which direct our decisions and general conduct.

It may sound paradoxical that our knowledge of the conscious ego is far behind what we know about the nature and functions of the id, and especially of the super-ego. It sounds paradoxical because the ego is the part of personality of which we are constantly aware and is the part which we think we know and feel as our actual personality. Perhaps, however, just this nearness to it is one of the reasons which makes its scientific investigation so difficult. The difficulty of understanding the ego with the help of the ego was expressed in older philosophical treatises by such metaphors as "it is impossible to cut a knife with a knife." Psychoanalysis, however, is not an introspective method, although it has to utilize introspection in understanding the personalities of others, because in psychology the presupposition of all such understanding of others is a knowledge of our own mental processes. The nearness to one's own personality is therefore undoubtedly one of the obstacles to an objective description of the functions of the ego.

This difficulty can easily be observed in clinical experience. Patients often admit without great resistance objectionable tendencies which

the psychoanalyst shows them are in their unconscious and outside their actual ego. Just because these condemned and repressed tendencies are outside the actual personality, they can be admitted, and the patient can comfort himself by saying: "These strange things are in my unconscious, but not in me, i.e. not in the part of my personality which I feel to be my ego." The real conflict arises only after the unconscious tendencies begin to enter the ego and the patient begins to feel them as part of his actual personality.

Another reason that it seems paradoxical for our knowledge of the ego to be less advanced than that of the unconscious parts of the personality is that the ego is far more complicated and advanced in development than the id, which is a reservoir of the primary forces, or than the superego, which is a kind of complex of highly differentiated conditioned reflexes and reflex inhibitions.

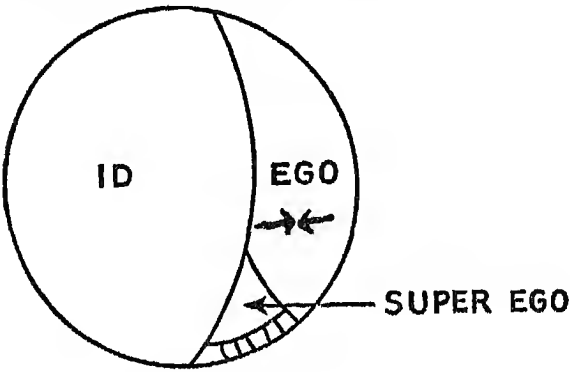
What can be said with certainty about the ego is that it is a formation of two perceptive surfaces, one directed toward the instinctual life (inner perception), the second directed toward external reality (sense perception). One main

function of the ego is to confront the facts of inner perception with the results of sense perception, i.e. to bring subjective demands in harmony with the external circumstances. Its tendency is to find satisfaction for as many of the subjective needs and wishes as possible under existing external circumstances. The conscious ego is the most plastic part of the mental apparatus since it can adjust the behavior at any moment to a given situation, in contrast to reflex and automatic behavior which is fixed and predetermined in a much higher degree. Automatic reactions are rigid and adjusted to certain stimuli and so cannot adjust themselves to a sudden change in the external situation, whereas the ego has the capacity of performing adjustments *ad hoc*.

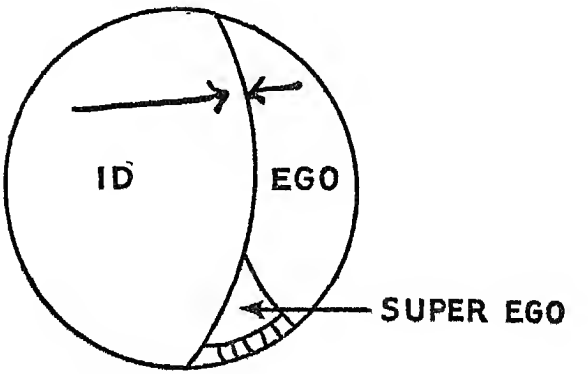
The functioning of the whole mental apparatus can be described approximately as follows: Instinctual needs and tendencies arising in the id tend to become conscious, because the conscious ego controls the motor innervations on which the satisfaction of the needs is dependent. A great part of the instinctual demands becomes immediately conscious and finds its acceptance or rejec-

tion after a process of conscious deliberation. This deliberation involves an estimate of the external situation and a comparison of the inner demand in question with other conflicting tendencies present in consciousness. For example, if some one had to decide whether he really wanted to attend a lecture or go to a theatre, there would be a conscious conflict which could be solved by a conscious judgment. Such tendencies and conflicts, however, have nothing whatever to do with repression. In such a case one desire is abandoned because it is incompatible with another more important. Repression, however, is a function which excludes certain tendencies from becoming conscious. It only occurs in cases in which the mere existence of a wish, irrespective of its realization, would cause an unbearable conscious conflict. To mention only one typical example, hostile feelings against a benefactor would tend to be repressed because they destroy our good opinion of ourselves. Similar non-social tendencies, to which the susceptibility of different individuals varies on account of the differences in their infantile experience, are inhibited even before they can become conscious. Repression, in contrast to

conscious rejection, is a process of inhibition which arises on a deeper level of personality—somewhere on the borderline between id and ego —and saves the conscious personality from becoming aware of a painful conflict.



CONSCIOUS CONFLICT



UNCONSCIOUS CONFLICT

FIG. 3

It is obvious that such an unconscious inhibiting process presupposes a kind of unconscious inner perception which leads to automatic, almost reflex inhibitions, similar to a conditioned reflex. This unconscious censoring function we ascribe to the super-ego. Repression is consequently based on a kind of unconscious censorship which reacts automatically to unacceptable tendencies. Although this process appears to us as a kind of unconscious selective judgment, which excludes certain definite tendencies from consciousness, nevertheless we have to assume that it operates schematically, is incapable of subtle differentiation and reacts uniformly to certain emotional factors in spite of their actual and sometimes important differences. It is comparable with a conditioned reflex rather than with a deliberate judgment. To cite a trivial example—the repression of the first incestuously tinged sexual strivings of the child establishes a general pattern of sexual repression which persists in later life, so that at the reawakening of sexuality in adolescence, there is a general timidity and inhibition. The sexual impulse, although it has now lost its manifestly incestuous character and is directed

to acceptable exogamous objects, suffers from the intimidations of the childhood. The super-ego lacks the capacity of making finer distinctions and represses sexuality in general without being able to recognize that the object of striving is no longer the same as in childhood. The well-known picture of the adolescent as shy and inhibited shows the result of this automatic process of restriction. In short, repression is always exaggerated and involves tendencies which the conscious ego would not reject if they became conscious. This important automatic and over-severe inhibiting function of the super-ego appears as one of the most general causes of psychoneurotic disturbances. Psychoneurotic symptoms are the dynamic results of unbearable tensions occasioned by the weight of exaggerated repressions.

Let us now describe the act of repression more fully. It starts with the super-ego's inner perception of a dynamic tension which tends to become conscious in order to induce the motor innervations necessary for its release. If the tendency is in conflict with the code of the super-ego, the conscious ego rejects it from fear, which is the

motive power of repression. The ego, acting on the cue given by the super-ego, rejects the condemned id-tendency and so produces what we call repression. The fear felt by the ego for the super-ego is the signal which warns the ego to repress, and this intimidation of the ego by the

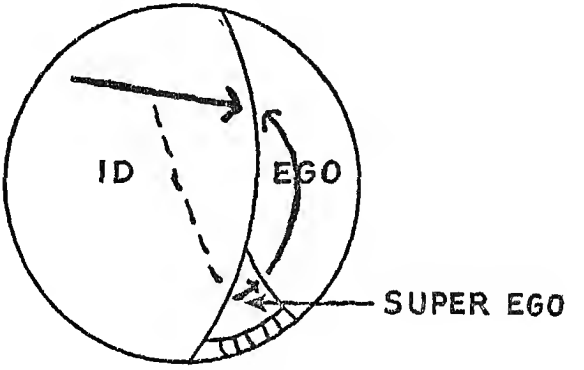


FIG. 4

The dotted line represents the inner perception of the repressed tendency by the super-ego. Repression is like a reflex arc consisting of a sensory and a motor part. The dotted line represents the sensory part, the arrow starting in the section, super-ego, and continued in the ego, the motor part. Repression is an automatic or reflectory inhibition.

super-ego can be considered as the continuation of the pressure which the parents brought to bear upon the child during the period of education.

The ego is exposed to two directing forces: the

individual needs arising from the id on the one hand, and their denial by the super-ego on the other. Its tendency is to compromise between the two forces by modifying the id-tendencies in a way which is compatible with the code of the super-ego. This process we call domestication or sublimation of the original, inherited, non-social demands. Sublimation is what occurs in normal adjustment. The neurotic and psychotic personality is characterized by a relatively small capacity for sublimation.[1] These pathological personalities stubbornly hold on to their original tendencies, which they cannot carry out, because, paradoxically enough, they have at the same time developed a harsh super-ego. They are both over-social and non-social at the same time.

The Theory of Symptom Formation

In neurotic personalities, owing to the lack of sufficient sublimation or of direct gratification,

[1] The *absolute* rate of the capacity for sublimation may in certain cases of neuroses be great, but then the inhibition of unsublimated gratifications makes the need for sublimations greater than the neurotic is able to perform—hence the production of symptoms.

the only way for the ego to find relief from the pressure of unadjusted and repressed tendencies is to offset in some way the super-ego's rejection of them. There are two common mechanisms by which relief, in the form of neurotic and psychotic symptoms, is found. The first was early described by Freud as the method of distortion. The non-social tendencies cannot appear themselves in consciousness, but they send into consciousness substitute expressions by means of different complicated processes such as allusions, analogies and symbols. In this concealed manner they can appear in consciousness but they lose connection with the rest of mental life. They are unintelligible, isolated, foreign bodies in the personality, disconnected from the rest of the conscious mental processes.

Since we had recognized the super-ego's faculty of an immediate inner perception of unconscious tendencies their distortion cannot be considered as an effective means to avoid the super-ego's rejection. A guilty conscience, indeed, may arise without any conscious reasons. The distortion of unconscious tendencies serves merely the purpose to avoid the violation of the

conscious ego, but does not eliminate the super-ego's condemnation, which manifests itself in seemingly unmotivated fear and sense of guilt.

Only a few years ago I succeeded in showing that the most general mechanism, through which repressed tendencies appear in consciousness without violating the super-ego and consequently without creating conflict and fear, is a peculiar way of bribing the super-ego. The ego accedes to the educational principles represented by the super-ego by self-punishing mechanisms, offering suffering as a price for the gratification of non-social tendencies.

A primitive theory of criminal justice displays itself in this mechanism latent in the depths of the personality. The basis of this peculiar psychological method by which the ego severs its dependence from its super-ego is the view that punishment or suffering in general is able to expiate crime. This attitude, which still prevails in contemporary jurisprudence, considers punishment and crime currencies which can be exchanged at a certain rate. In the neurotic personality this principle is realized in the

paradoxical need for punishment or suffering. The ego exploits the suffering attendant on neurotic symptoms as a kind of moral justification, or license to indulge forbidden wishes. The ego caught between the pressure of the id-tendencies and the inhibitions of the super-ego solves the conflict by complying with the super-ego in the form of suffering. It thus disarms the inhibiting super-ego, and now free from moral restriction is able to indulge id-tendencies in the form of neurotic symptoms. Every psychoneurosis is, therefore, a compromise between repressing and repressed forces in which suffering represents the compliance of the ego with the social claims of the super-ego, while gratification represents the acceptance of the non-adjusted tendencies of the id. As to further details regarding both of these mechanisms, the method of distortion and the bribing of the super-ego by suffering, I must refer to the literature, since it lies beyond the scope of this book to present the detailed observations which substantiate this theory.[1]

[1] F. Alexander: "Psychoanalysis of the Total Personality." Monograph Series of Nervous and Mental Diseases, Vol. 52, 1930. T. Reik: "Geständniszwang und Strafbedürfnis." Internationale Psychoanalytische Bibliothek, Nr. XVIII, 1925.

It should now be clear that neurotic and psychotic symptoms are the result of a schematic and automatic process of repression which creates an extreme tension of the original tendencies which have been denied realization. Repression, however, is a function which originates in childhood. It is a product of education and has all the characteristics of a drill. Repression is the infantile way of controlling the original tendencies, since the infantile ego has not yet the ability either of judgment or of spontaneous renunciation. The only way to avoid the intolerable feeling of thwarting is the drastic exclusion from consciousness of tendencies which cannot be realized. After these inhibitions have once become automatically established in childhood, they have the tendency of all automatisms to persist. There are many reasons for assuming that the neurotic ego makes a more extensive use of repression to control the instinctual life than the normal one.

The ego of the adult psychoneurotic, which is usually well developed, could easily digest and modify the original tendencies and could also

renounce some of them if it only knew about them. Through repression, however, the ego is separated from the instinctual life, and this situation is reflected in the diminished amount of freely dispensable mental energy in the neurotic personality. Repression is a more comfortable way of controlling unadjusted tendencies than conscious rejection, denial or modification, but it is too radical a method. The price which the neurotic pays for this comfort is his mental health and it is too high. He spares himself the painful struggle between temptation and its denial but, in doing so, he sacrifices most of his freely dispensable mental energy.

The technique of psychoanalytic therapy follows consistently from these concepts. The aim of therapy can be formulated as an attempt to replace the automatic restrictions of the superego by conscious judgment. Wide therapeutic experience has shown that with psychoneurotics this can be undertaken without danger, for their egos are capable of controlling the instinctual life if they come in contact with it. Naturally, the removal of repression burdens the conscious per-

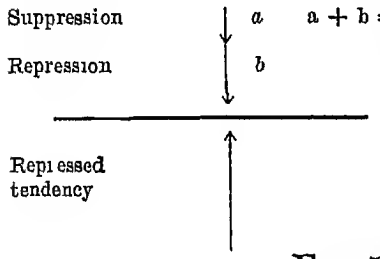
sonality with painful insight and a new problem and creates a conscious conflict. It also increases the responsibility of the conscious personality by extending its field of activity over hitherto unconscious portions of mental life. But this is the only way of changing those dynamic conditions in the personality which furnish the basis of psychoneuroses.

As long as tendencies remain unconscious they cannot undergo modification and sublimation because these processes are precisely the result of the interplay and contact of individual tendencies with the environment and constitute adjustment to external reality. The contact of the subjective needs with the environment is prevented by their exclusion from consciousness, since the conscious ego is the portion of the personality which is in touch with external reality. Thus, adjustment of the instincts is made impossible. Only after it has been brought to consciousness can the ego modify and sublimate the mental energy bound up in the psychoneurotic symptoms.

The Theoretical Foundation of the Psychoanalytic Technique

In psychoanalytic technique there are two efficient factors at work replacing infantile super-ego-reactions by conscious judgment. One is intellectual, the other highly emotional. The first is the method of free association. By this method conscious control in trains of association is eliminated, and if the process is continued over a sufficient length of time, material is gradually brought to the surface of which the patient was previously unaware. In the exclusion from consciousness of certain tendencies, there is in addition to unconscious repression, a conscious and voluntary selective process called "suppression," which eliminates from the focus of interest everything which is even loosely connected with unconscious material. Suppression also eliminates all kinds of irrelevant material which would distract the attention from the topic which is at the focus of interest at any given moment. The elimination of the conscious control in trains of thought is a technique which is easy to acquire

and is, in fact, nothing but overcoming suppression. If this is done, the tendency of unconscious material to express itself has to contend only with repression, the unconscious dynamic factor, and unconscious material begins to pour into consciousness. One might cite the analogy of a spring compressed by two weights. If one weight is removed, the spring will expand.



a + b = total amount of the force, which excludes repressed material from consciousness. In the method of free association *a* (suppression) is eliminated and thus the unconscious material has to cope merely with *b* (repression).

FIG. 5

At the same time the emotional factor begins to appear, for the patient soon notices that the unconscious material which he so harshly condemns is not condemned or even evaluated by the psychoanalyst. He sees that the psychoanalyst is interested only in understanding the origin and meaning of these manifestations and does not pass any judgment upon them. With this assurance, the unconscious becomes gradu-

ally bolder and bolder, and exhibits itself with increasing frankness and clarity. What really happens is that the patient's ego loses more and more of its dependence on the super-ego and transfers his emotional dependence to the psychoanalyst in adopting the same emotional attitude toward him which he previously had toward his super-ego. Since the super-ego is a precipitate of early education, an inwardly embodied image of the parents, the transference of the rôle of the patient's super-ego to the analyst results in a reproduction of the child-parent relationship during the analytic sessions. The analysis of the relation between patient and analyst corroborates unambiguously this theoretical description and the patient himself very soon detects that his emotional behavior during treatment is often a strikingly exact copy of his childhood behavior. This revival during analysis of the emotional reactions of childhood, which have played so important a rôle in causing the psychoneurosis, offers a unique opportunity of understanding and reconstructing the pathogenic situations of the patient's past. The repetition of past emotional experiences in the relationship between

patient and psychoanalyst, Freud called "transference," and the renewal of the infantile conflict in the transference he described as the development of a "transference-neurosis" which goes hand in hand with the disappearance of the actual neurotic symptoms. The same tendency which created the symptom now expresses itself directly in the patient's emotional reactions to the psychoanalyst.

At this point it is important to emphasize that this kind of emotional relationship between patient and physician develops spontaneously in any form of psychotherapy, even in the relation of a patient to the physician who treats his organic diseases. It is a commonplace that in the presence of a physician who has succeeded in gaining the confidence of the patient, the subjective mental state of the patient is relieved and that very often his symptoms, in so far as they are psychologically determined, improve. The most important therapeutic contribution of psychoanalysis consists in the psychological understanding and conscious handling of the transference. There was a time at the beginning of psychoanalysis when Freud was not yet able to esti-

mate correctly the significance of this period when the symptoms disappear as a result of the transference-neurosis. Analyses interrupted at this stage, however, afforded only temporary relief and it soon became apparent that overcoming the transference-neurosis was a necessary part of therapy, for it effected only a pseudo-cure by changing the outlet of neurotic tendencies without permanently altering the relation of the ego to the instinctual life.[1]

The elimination of the transference-neurosis takes place only in what we refer to roughly as the second part of the analytic treatment. The advantage of the transformation of neurotic symptoms into transference manifestations lies in the fact that the transference manifestations are transparent, can be easily verbalized and so made conscious. The experienced psychoanalyst becomes able not only to understand the meaning of the transference manifestations but also to help the patient in finding precisely those verbal expressions which describe his emotional

[1] One of the earliest analytic treatments which was interrupted during the phase of the "transference-neurosis" is Freud's famous case "Dora," which—a partial failure—gave Freud the first opportunity to realize the importance of the "transference."

attitude. By these interpretations, the analyst forces the patient's ego to understand and face those psychic tendencies which were before repressed. To sum up briefly: In the relaxed and matter of fact atmosphere of the psychoanalytic sessions the patient is encouraged to express himself in intelligible language instead of in the distorted language of his symptoms. The next step is to force the conscious ego to recognize the meaning of these transparent manifestations.

An important quantitative factor still remains to be discussed. It is important to realize how much better capable the adult patient's conscious personality is to face and assimilate repressed tendencies than his infantile ego was at the time when they were originally repressed. In psychoanalytical treatment a fully developed adult ego is called upon to face tendencies which the infantile ego could not endure. On the other hand, the transference manifestations, though qualitatively the same as the corresponding emotions of childhood, are quantitatively much less intense. Transference can be considered as a kind of "shadow play" of childhood. When the patient, for example, exhibits toward the psychoanalyst

the same hostility which was originally directed toward the father, this emotion is not likely to have the same intensity it had in youth, because the actual situation to which this emotion belonged no longer exists. The transference emotion is merely a projection of the past into the analytic situation and the analytic situation is in reality nothing more than the relation between patient and physician. These transference manifestations occur under the continuous control of the ego and the patient is constantly aware of their objectively unmotivated nature. The essential point is that in the transference, the adult with his stronger and more resistant ego faces in reduced quantity the same kind of conflict which as a child his weak ego could not solve. The solution of the reduced emotional conflict effects an increase in the resistance of the conscious ego, which becomes able to face mental conflicts and situations which were previously unbearable. This principle of analytic treatment can be compared with that of active immunization, by means of which the resistance of the body is partially increased by fighting small quantities of toxin.

The best experimental test of the correctness

of this description is the fact that as a result of the correct interpretation of the transference situation, the corresponding forgotten infantile memories as a rule reappear in consciousness. The ego no longer has any reason for excluding the memory of past situations, which it has forgotten only because of associations with unbearable emotions.

The fact that we are able to describe in this way the psychological processes which take place during the treatment gives the psychoanalytic treatment a unique position in the field of psychiatry. In psychoanalysis we are able to follow the psychological processes in the patient during treatment and that makes analysis a reasoned and exact psychological method in contrast to all other current psychotherapeutic measures which, whether successful or not, are based much more on vague empirical observations than on a thorough understanding of the therapeutic process itself. Knowledge of the therapeutic mechanism is, however, the only way of gradually improving therapeutic technique. Although the efficiency of quinine was known before the biological basis of malaria was understood, a therapeutic measure

can be considered scientific only when its use is based on a detailed knowledge of underlying processes, rather than on a fortuitous discovery of its effects.

It should now be clear that the application of psychoanalytic technique is limited to cases which fulfill certain conditions. The therapeutic theory is that the conscious ego, having been burdened by the knowledge of repressed tendencies, will be able to control them and dispose of them in a conflictless, acceptable manner. This expectation implies the assumption that the adult patient's ego no longer needs the automatic regulation acquired in childhood and represented by the categorical rule of the super-ego, because the ego itself has acquired during the process of mental growth normative principles which guarantee adjusted behavior. Many years of experience have proved that in the great majority of psychoneuroses these conditions are fulfilled. There is no danger of turning the psychoneurotic into a species of criminal by removing his repressions. On the contrary, the psychoneurotic, relieved of his repressions, becomes better adjusted socially, because he has found a satisfac-

tory compromise between his subjective needs and the demands of society. It was precisely the over-emphasis on repression which created an unbearable tension within him and prevented the originally non-social tendencies from undergoing modification, domestication, and sublimation. The original non-social tendencies, when repressed, preserve their non-social form and have to find artificial outlet in neurotic symptoms. The penetration of these tendencies into consciousness takes place only gradually and in small quantities during the treatment, and the ego therefore has time gradually to acquire control of these explosive forces and to apply them to normal social activities.

There are, however, unquestionably cases in which the fitness and maturity of the conscious ego cannot be counted on. I am thinking chiefly of two groups of personalities: (1) certain infantile types in which the ego is not fully developed, and which, consequently, cannot stand the process of analysis which burdens the weak ego with new conscious responsibilities and (2) certain types of schizophrenics. The schizophrenic ego betrays its weakness in the fact that

under the pressure of subjective needs it is willing to give up its basic function, testing reality, and to sacrifice sense perception for hallucinations and delusions, falsifying reality in accordance with its subjective needs. In both these cases, infantiles and certain types of schizophrenics, the employment of the psychoanalytic technique, as I have described it, is not practicable without a preliminary treatment, the aim of which is to strengthen and reëducate the ego. The demand for this, however, is as yet hardly more than theoretical, as we are not yet able to determine the psychological influences by which an ego which has failed to develop normally may be strengthened. We are also still ignorant of the extent to which defects in the ego are due to inherited constitutional factors.

Psychoanalysis does not claim to be able to cure all forms of mental disturbance or all kinds of pathological personalities. It only maintains that all future methods of psychotherapy must be based on an understanding of the fundamental psychodynamic processes just as organic medicine has founded its therapeutic measures

on an understanding of the underlying physico-chemical processes. An insight into fundamental psychodynamic structure is the principal contribution of psychoanalysis to psychiatry.

CHAPTER III

CRITICAL CONSIDERATIONS ON THE PSYCHOANALYTIC TREATMENT OF PSYCHOSES

III. CRITICAL CONSIDERATIONS ON THE PSYCHOANALYTIC TREATMENT OF PSYCHOSES

THE psychodynamic approach to the understanding of mental disturbances can be considered as a decisive step for the whole of psychopathology. It is due to this new point of view that psychopathology has overcome its merely descriptive stage and has become an explanatory science. The psychodynamic approach has also made it possible to influence psychopathological processes in an intelligent and systematic way, even if an extensive application of the analytical technique has been hitherto restricted to milder disturbances such as psychoneuroses.

As was pointed out in the last chapter, the psychoanalytic treatment of the psychoneuroses is based upon the fact that the psychoneurotic ego is able to face and make an acceptable use of

those tendencies which were repressed by the weak, under-developed ego in childhood. This fact can be formulated by saying that the ego of the psychoneurotic is relatively well-developed and that the disturbance of the personality is based upon an early break between the ego and the emotional and instinctual life. The therapeutic problem consists merely in a rebuilding of this disturbed connection between the instinctual life and the ego. As has already been briefly explained, the employment of the psychoanalytic technique as used with psychoneurotics is strictly dependent upon a relatively well-developed ego. In all cases of psychic disturbances in which this condition is not fulfilled, the application of the psychoanalytic technique without important modifications seems in advance to be out of place. In all cases in which we have to assume that the ego itself is under-developed and lacking those faculties which differentiate the adult ego from the childhood ego, the capacity to estimate, to accept and reject, to endure tensions and deprivations, the psychoanalytic technique cannot be used with advantage because it forces the ego to cope with a problem which it is unable to accom-

plish. The effective means employed by the infantile ego to protect itself from emotional situations which it cannot master is repression. To force an ego to use other measures of which it is genuinely incapable would be a senseless procedure.

It seems that at least in a large number of cases, the schizophrenic suffers from a constitutionally or developmentally conditioned weakness of the ego. Nevertheless, in recent years, attempts to cure severe cases of psychosis by analytic means have become more frequent, although the therapeutic value of these experiments has been much debated. It is worth while to stop for a moment to review critically the work done and the methods employed. Such a critical review has proved necessary and fruitful in every science, for the investigator, submerged in daily routine, easily loses his judgment and is inclined to fall into a rut, uncritically employing highly developed and specialized methods in the treatment of cases which are different. There is an imminent danger, since psychoanalysis has begun to experiment with psychoses, that this highly special-

ized method may be employed in the treatment of cases to which it is not strictly applicable.

As is well known, the psychoanalytic method of investigation and therapy was originally limited to certain types of psychoneuroses. But the rich harvest of psychological knowledge of general application has induced psychoanalysts to study new types of cases from the same point of view and to test the efficiency of analytic therapy on other mental disturbances than those for which the technique was originally designed. It seems to me of great importance to distinguish in the extension of psychoanalytic methods between research and therapy. The employment of psychoanalytic knowledge for the understanding of other mental disturbances than the psychoneuroses which were first investigated is legitimate, but the same therapeutic procedure with other kinds of cases is highly problematic. It is certain that illnesses with a different psychodynamic structure require modifications in the technique.

As a matter of fact, a modification of technique proved necessary when psychoanalysis was first applied to children. In child-analysis the technique used with adults was found inadequate

because the same coöperation cannot be expected from a child as from an adult, and the child cannot be induced to assume the mental attitude required by the method of free association. In the place of free association, Melanie Klein introduced the ingenious method of the play-technique.[1] She observed the playing child and interpreted the products of its phantasy displayed during spontaneous play. By means of this change in technique, however, she tried to make the child conscious of the latent meaning of the manifestations of its unconscious, so that Melanie Klein's technique, although better adjusted to the nature of the child, is based essentially upon the original therapeutic principle of making conscious repressed material.

Anna Freud in her technique of child analysis [2] went even further in changing the original principles. She took into consideration the fact that in children the dynamic relation between the impulses and the ego is different than in adults. The child's ego is relatively weak but at the same

[1] Melanie Klein: "Infant Analysis," Int. Journal of Psychoanalysis, Vol. 7.

[2] Anna Freud: "Introduction to the Technique of Child Analysis," Nervous and Mental Diseases, Monograph Series, Vol. 48.

time flexible. Anna Freud, therefore, tried to influence it directly in an educational sense on the one hand, and on the other she tried to estimate more carefully the extent to which the child's weak ego can be burdened with interpretations, i.e. the knowledge of repressed material.

I mention the technique of child analysis only as an example of the necessity of changing the technique in applying it to new and different therapeutic fields. It is only natural that there is a demand to make use of experiences obtained from the study of psychoneurotics in the treatment of psychoses. In the following pages, I shall restrict myself to the problem of applying analysis to schizophrenic psychoses. According to Abraham's and other psychoanalysts' experience with manic-depressives, it seems that the original psychoanalytic technique does not require essential modification in these cases, although apparently not all disturbances of this category are susceptible of psychoanalytic treatment.[1]

[1] It seems that the importance of psychogenic factors is not the same in all cases of manic-depressive disturbances. Cases with a predominant endocrine origin are naturally not suitable for psychotherapy.

If one considers the problem of treating schizophrenic psychoses from a superficial and merely technical point of view, the only concrete difficulty in applying analytic technique appears to lie in the difficulty of securing the coöperation of the psychotic patient in establishing rapport with the physician. In many cases this difficulty is only temporary and prevails only during severe psychotic episodes, so that analytical technique could be tried in the lucid intervals, when the patient often displays not only a considerable capacity for "transference," but even a great desire for emotional contact with others. In such cases, the external conditions for the employment of analytic technique are fulfilled.

The most direct and simple way of deciding whether the treatment applicable to neurosis is also feasible in cases of psychosis would undoubtedly be experiment, but in medicine experimentation is to a certain extent limited by a therapeutic interest in the welfare of the patient. Senseless and presumably unsuccessful or even harmful experiments must be excluded. Unfortunately, our knowledge of the specific structure of neurotic and psychotic personalities is not yet

far enough advanced to enable us to decide definitely from purely theoretical considerations whether the analytic method is applicable to psychoses without essential modification.

Actual experience is still insufficient to permit a decisive opinion. Up to the present, psychoanalytic treatments have generally been applied in an ambulatory way, which with psychoses is generally difficult and risky. Partly for this practical reason, and partly also from theoretical considerations, the general attitude among psychoanalysts has been that the diagnosis of schizophrenia is a contra-indication for psychoanalytic treatment. In recent years, however, there has been a change in this rigid attitude and in some of the psychiatric hospitals psychoanalysis has become an accepted method, as for example in Bloomingdale Hospital, the Shepherd and Enoch Pratt Hospital and in the McLean Hospital in America. E. Simmel in Berlin, and B. Glueck in America have opened psychoanalytic sanitariums for analytic treatment of hospitalised patients, and although detailed and critical reports are still lacking, all these institutions have encouraged a more optimistic attitude.

In contrast to this, however, is the fact which experienced analysts have repeatedly observed, that psychoanalytic treatment may precipitate schizophrenic episodes in cases where latent schizophrenia had not been diagnosed before the analysis.[1] I, myself, have had occasion to observe cases in which I could not explain the onset of an episode otherwise than as a reaction to the analytic approach. Experiences of this sort have made me cautious, and without formulating definite theoretical principles for all cases in which schizophrenia was suspected and in which nevertheless I undertook a psychoanalytic treatment, I changed my technique. With a changed technique, I could see positive results, or at least avoid reactive episodes, and most psychoanalysts who have reported on the treatment of psychoses have agreed that they have also found it necessary to change their technique. A. A. Brill reported several cases in which he had good results

[1] L. E. Hinsie remarks that there are only "impressionistic comments" in the literature, that psychoanalysis has a detrimental influence on the management of schizophrenic patients. The precipitating influence of the "classical technique" in cases of latent schizophrenia is, however, a well-established experience. L. E. Hinsie: "The Treatment of Schizophrenia," p. 169, The Williams and Wilkins Co., Baltimore, 1930.

with a modified technique,[1] and G. Zilboorg emphasizes the necessity of a "long preliminary period of reality testing," in which the analyst should gain the positive transference of the patient.[2] L. E. Hinsie's thorough study, "The Treatment of Schizophrenia," in which he gives an extensive review of the various modifications in technique suggested by psychiatrists and psychoanalysts also deserves mention.

The fact of psychotic reactions to the analytic approach is, paradoxically enough, by no means an unfavorable sign, for it shows that the course of a psychosis can be influenced by psychological influences and it is a question of secondary importance whether this influence has hitherto been exercised in a favorable or unfavorable direction. Once the essential fact is established that the course of a psychosis yields to psychological treatment, there is a theoretical possibility that

[1] It would be highly desirable if a psychoanalyst of A. A. Brill's experience gave further details as to the modifications that he mentions in his article, "Schizophrenia and Psychotherapy." American Journal of Psychiatry, Vol. IX

[2] The same remark applies also to G. Zilboorg's article, "Affective Reintegration in the Schizophrenias." Archives of Neurology and Psychiatry, Vol. 24. The expression which he uses: "a long preliminary period of reality testing," implies a modification of technique, by means of which the usually loose relation of the schizophrenic ego to reality is reconstructed.

an intelligent method may be invented by which cures could be effected.

It is impossible to form a definite opinion on the possibilities of the psychoanalytic treatment of psychoses as long as there are no reports which give an exact description of the technique employed instead of simply reporting positive or negative results. The psychoanalytic treatment of psychoneuroses is sufficiently developed and refined for us to give a detailed account of its different therapeutic factors. We can follow the process of the cure and know with fair precision what is going on in the mind of the patient. Psychoanalytic treatment today is no longer based on rough observation but on a detailed knowledge of the mental apparatus and of the dynamic structure of the psychoneuroses. A blind application of psychoanalytic technique would be contrary to its scientific nature, and as we know the basic differences between the dynamic structure of psychoses and neuroses, we should be able at least to outline those modifications in technique which follow necessarily from the differences between the psychotic and the neurotic minds. I shall restrict myself to a few fundamental con-

siderations which should be regarded merely as suggestions to be tested in the future by clinical experience.

We may define the chief difference between psychoses and psychoneuroses by stating that whereas the psychoneurosis is chiefly a conflict between the different structural parts of the mental apparatus, in psychoses the relation of the mental apparatus to the external world is profoundly disturbed. The psychotic, during episodes or in progressive stages, continually loses his orientation in the external world because he falsifies the data of his sense perceptions. To express it simply, the psychotic is so largely subject to the pressure of his subjective non-adjusted demands that he cannot accept a reality which opposes them and falsifies the picture of the external world which his senses and normal thinking offer him, and so sees things other than they really are. The most extreme forms of this falsification of reality are hallucinations, but illusions and even delusions have a similar significance. This falsifying tendency has a transparent mechanism in delusions in which the psychotic perceives in himself unacceptable hostile

or sexual tendencies and simply refuses to accept them as his own mental possessions and projects them on others. The well-known resistance of paranoiacs against all explanations of their symptoms, and the impossibility of convincing them of the error of their delusions, is based upon the fact that they actually perceive hostile or sexual emotions in themselves. Their error consists only in wrongly locating these emotions. Feeling the presence of their emotions, they will not admit that they belong to their own personality and so incorrigible delusions arise, the vividness of which is based on the actual inner experience of the projected emotions. We may express this otherwise by saying that the psychotic has, in a sense, no respect for reality. It is easier for him to relinquish his contact with reality than to control his own emotions, and as a result he solves his inner conflicts by changing the picture of reality in accordance with the subjective demands.

At this point it is important to distinguish between two kinds of conflicts in psychotics. The first is of an infantile type and can be expressed in the following way: "The world is not as I

should like to have it. I do not want to live in such a world and therefore prefer to live in a fantastic world, and am, therefore, ready to sacrifice real satisfactions and content myself with hallucinations of my own choosing."

The second type of conflict produces delusions and all paranoid phenomena and is the same as we find in psychoneuroses. These conflicts are no longer based upon the fact that external reality is contradictory to the subjective tendencies, but on the fact that certain emotional tendencies are not acceptable to the socially adjusted part of the ego, the super-ego. In the neuroses hostile and sexual tendencies, unacceptable to the super-ego, are repressed and return in a disguised form as neurotic symptoms and find in this way a substitutive satisfaction. In the psychotic mechanisms the tendencies which are rejected not by external reality, but by the super-ego, are not repressed but projected. They are not recognized as one's own, but are attributed to external reality. While the paranoid mechanisms are falsifications of both internal and external reality, hallucinations and illusions are only falsifications of external reality. The hallucinating patient

only changes the picture of the external world, but the paranoid denies something in himself.

It should now be evident that these two categories of symptoms, the simple falsification of reality and the paranoid symptoms, may provide the basis for a classification of the various forms of schizophrenia. The paranoid mechanisms resemble the neuroses more closely, for the more highly organized portions of the mental apparatus are still functioning. They show the dynamic efficiency of the socially adjusted part of the ego, for paranoid patients are not able to get rid of the influence of their super-ego. The fact that they project certain emotional tendencies proves that they cannot accept them. Repression, the method of the neurotic patient, is, however, impossible for them. Their ego is unable to exclude from consciousness those tendencies which the neurotic is able to conceal or distort. The paranoid psychotic cannot repress tendencies foreign to the ego nor can he accept them, and his only solution is projection. He is aware of these tendencies, but being unable to repress them must deny them as part of his own ego. Hallucinations and illusions do not presuppose such an inner

conflict between the super-ego and the tendencies hostile to the ego, for they are merely solutions of a conflict between the ego and external reality. This mechanism is, therefore, more infantile, because it corresponds to an early stage of development in which the conflict between subjective demands and reality is not yet inwardly reproduced as a conflict between subjective demands and the super-ego.

Paranoid hallucinations occupy an intermediary position, for in them the threats of the super-ego are projected on external reality in an attempt to get rid of the super-ego. If we remember that the super-ego has developed by assuming and embodying the moral and educational prescriptions of the parents, paranoid hallucinations may be considered as a regression to the period in which the ego was controlled merely by others, and the child sacrificed his desires from fear of his parents' restrictions.

In many cases of schizophrenia, the ego also loses its synthetic function of harmonizing the different and often contradictory instinctual demands. The sudden unmotivated aggressive attacks and self-destructive behavior are clear signs

of disintegration in the structure of the ego. It seems to me unjustified to regard the impulsive self-mutilations of schizophrenics as the self-punishing reactions of a harsh super-ego. It is impossible to assume that the schizophrenic, who is no longer guided by the fundamental dictates of the super-ego, such as pity and disgust, and who indulges in coprophilia, should at the same time be affected by the exquisitely moral need for punishment. The self-mutilations, although symbolic of self-castrations, are rather manifestations of isolated passive-female wishes, which find an outlet after the synthetic function of the ego is eliminated. The polymorphous, rhapsodic behavior is the manifestation of disorganized instinctual demands which have lost their interconnections and seek outlets independently of each other.

These considerations indicate a distinction between two main groups of schizophrenia, the one characterized by the predominance of paranoid symptoms, (paranoid hallucinations and delusions) the other by simple falsifications, hallucinations and illusions. The theoretical and therapeutic evaluation of cases with pronounced

paranoid symptoms must be different from those which do not exhibit them. The paranoid cases display a greater participation of the super-ego and show that the ego structure is less deteriorated than in the other class. A common factor in both cases, however, is the amazing ease with which the psychotic gives up his connection with reality and falsifies it according to his subjective demands. The general characteristic of schizophrenia is consequently the ability to dispense with reality which differentiates it fundamentally from neuroses in which such a radical flight from reality is impossible. The neurotic is too loyal to reality to be able to deny its objective nature and, consequently, must work out the conflict within himself. The dynamic relation between the ego and the instinctual demands is exactly the opposite in psychoses and neuroses. In neuroses the ego is strong and overpowers the instinctual demands—the neurotic symptom is a protest of the restricted instincts—but in psychoses the ego is weak in relation to the instinctual demands, hence the apparent lack or at least weakness of repression. In psychoses the instinctual demands overpower the ego, and the ego, following the pres-

sure of these demands, abandons its oldest and first acquired function, the recognition of reality. At the same time, however, the ego loses its other function of harmonizing the different instinctual demands and turns out to be weak in the face of both external reality and the pressure of the primitive unadjusted instinctual tendencies.

Our knowledge of the developmental phases of the mind permits a more precise evaluation of the difference between psychoses and neuroses. We have many reasons for assuming that the infant's psychic processes are similar to those which adults manifest only in their dream life, and are also similar to hallucinations of schizophrenics. Many years ago, Bleuler referred to the similarity of dream processes and schizophrenic manifestations. The differentiation between an ego and a non-ego is undoubtedly one of the first accomplishments in the individual's development, and the acceptance or substituting by hallucinatory phantasies the data of sense perception is the basis of this distinction. We may say, therefore, that the hallucinating psychotic gives up his first adjustment to external reality which has nothing to do with the later

social adjustment, which is disturbed in the neuroses. The former is simply an adjustment of the individual to the facts of physical reality and takes place during the first two years after birth before the differentiation between ego and super-ego has begun. We must assume that patients who later develop schizophrenia have not accomplished satisfactorily this first step in development, and the distinction between an ego and a non-ego had never been firmly established in them.[1] Only a tenuousness in the relation to external reality can explain so radical a solution of mental conflicts.

The precipitating causes of psychoses, of course, belong to adolescence or adult life and we often observe precipitating conflicts of the same social nature as are effective in neuroses. In his flight from the conflicts of adult life, however, the psychotic reverts to a very early period when he was not yet able to distinguish between phantasy and reality, and it is precisely this depth of regression which is characteristic of psychoses.

[1] Storch very appropriately calls this phenomenon "Grenzverwischung zwischen Ich und Umwelt." Dr. Alfred Storch: "Das Archaisch-Primitive Erleben und Denken der Schizophrenen," Julius Springer, Berlin.

The developmental difference between psychoses and neuroses is that adjustment to reality in the former has been disturbed at a very early period, while in neuroses, the disturbance dates from the emotional conflicts with others, parents and siblings, viz. from the period of the development of the super-ego.

This early origin of schizophrenic symptoms allows us to make an etiological postulate that in schizophrenic psychoses the inherited constitution generally plays a more important rôle than in neuroses. It is difficult to imagine that external influences are alone responsible for this early weakness of the ego which interferes with the first adjustment to physical reality, unless we find in the majority of cases such unusual and violent psychological influences as can explain this early rejection of reality.

I admit that the etiological theory of the constitutional weakness of the "Ego-Anlage" is too general to be an altogether satisfactory scientific concept, but as long as we have nothing better to put in its place it may serve for general orientation and help us to avoid overemphasizing the psychogenic theory of schizophrenia. The

influences of post-natal development may also play a very important rôle in many cases. All influences which strengthen the ego-reality relation, or all influences which tend to make external reality more acceptable even to a weak ego, will decrease the efficiency of psychotic tendencies; and *vice versa* all later influences which make it difficult for the ego to accept external reality will increase the likelihood of a schizophrenic attack. A specific etiological theory of schizophrenia, however, must explain why the conflicts and influences of later life can drive these personalities back to such an early stage of development when the mind was unable to distinguish between external and internal reality, between ego and non-ego. The weakness of the faculty for making this distinction cannot be explained by later influences, which occur after this distinguishing faculty has developed in normal course. Traumatic influences even of later infancy cannot be responsible for the weakness of a faculty, the acquirement of which belongs to an earlier phase of development. Many people do not like the world as it is, but only a few—and those are the psychotics—deny it so forcibly.

Although they do not formulate all these considerations so precisely, the therapeutic attempts of our modern psychiatric hospitals display an intuitive grasp of these facts. The general tendency in modern hospitals to make the environment as agreeable and acceptable as possible for the patients is a therapeutic measure quite in harmony with the views here developed. The positive results of occupational therapy can also be similarly explained. If the patient finds a place which he can fill successfully, he will be more inclined to reaccept at least a part of reality and abandon his flight from it. The principle of adjusting the institutional environment to the personality of schizophrenics is most consistently realized in the therapeutic methods of H. S. Sullivan.[1] He adjusts not only the physical but also the human environment to the emotional life of his patients by employing as attendants schizoid personalities who have lost their "natural conviction as to right and wrong," and who consequently have an understanding of the peculiarities of the insane. Furthermore, he spe-

[1] Proceedings of the Second Colloquium on Personality Investigation, pp. 46, 47, and 107. The Johns Hopkins Press, Baltimore.

cially trains these "sensitive, shy and ordinarily considered handicapped employees" by teaching them to "cease to regard the schizophrenics in more or less traditional ideology as insane," but instead to see the many points of significant resemblance between the patient and employee. Sullivan reports unusually good results.

The principle of selecting attendants with personality traits similar in quality to the schizophrenic patients is in accordance with the observations of H. Nunberg[1] and K. Landauer,[2] that the reëstablishment of the patient's relation to the external world is based on an identification with the person or persons with whom he has continuous contact, and it is obvious that such an identification is more easily effected with individuals of a similar type. This also explains the frequency of pronounced homosexual tendencies in schizophrenics, for the homosexual object relation of schizophrenics is a pseudo-object relation, since it is essentially a narcissistic identification.

[1] H. Nunberg: "Der Verlauf des Libidokonfliktes in einem Falle von Schizophrenia." Int. Zeitschrift fur Psychoanalyse. Band VIII.

[2] Dr. K. Landauer: "Spontanheilung einer Katatonia." Int. Zeitschrift fur ärztliche Psychoanalyse, Bd. II.

What we are now interested in, however, is to make use of this knowledge to find the general principles of an adequate and consistent psychotherapy for psychotics. It should now be clear that the classical psychoanalytic technique is by no means adapted to the specific conditions of the personality of psychotics. This method was invented in dealing with neurotics and is well adapted to the psychodynamic conditions of psychoneuroses. The problem of the neurotic personality is to regain possession of the repressed mental content which his adult ego might easily control if it only knew of it. The problem of the psychotic is quite different. The problem is not to release repressions, but to induce the ego to accept external reality. The neurotic must learn to accept repressed *psychological* facts, while the psychotic must learn to accept rejected *external* facts.

In a brief article on denial, Freud has shown that the infantile ego accepts everything from reality which agrees with the first libidinal demands and rejects everything opposed to them.[1]

[1] S. Freud: "Die Verneinung." Gesammelte Schriften. Bd. XI. Int. Psychoanalytischer Verlag, Vienna.

The first division between ego and non-ego takes place on this emotional basis. The ego is in the beginning a collection of everything that is good, acceptable and connected with pleasure, while everything that is bad and unacceptable belongs to the non-ego. Gradually from external reality more and more is accepted but always more easily those things which we love. Probably the positive attitude towards the objects of the external world, object-love in distinction from narcissistic love, is that which is less developed in cases which later develop schizophrenia. The capacity to change narcissistic libido into object libido is less in the psychotic personality and this seems to be a constitutional feature of the psychotic.

The aim of an intelligent psychotherapy should, therefore, be to increase the libidinal relations of the ego to the external world. How this principle is carried through in institutional treatment has already been described. In psychotherapeutic treatment the consistent fostering of a positive transference will remain the most important technical therapeutic device. In a noteworthy article, Nunberg described the cure of

a catatonic episode,[1] and showed conclusively that during the treatment the physician as the object of a positive transference was the first point of crystallization in the gradually increasing acceptance of external reality. As a kind of catalyzer the analyst concentrates in himself all the positive feelings of which the patient is capable and during the healing process the patient directs this positive feeling from the psychoanalyst to other objects of reality. The psychotherapy of schizophrenia must be based on the systematic and deliberate handling of the positive transference, and also on the skilful steering of the further extension of positive feelings from the analyst to other objects. Especially this latter process is difficult, because schizophrenics after having accepted the analyst as the only object are apt to cling to him with an extremely strong passive-dependent attachment and refuse stubbornly to transfer their positive feelings from the analyst to other objects. All further details and technical devices must be based on practical experimentation. Whether the interpretation and reconstruction of repressed mental

[1] Loc. cit.

content are justified in the treatment of psychoses is dependent upon the degree to which the psychosis is mixed with neurotic mechanisms. It seems to me quite evident, however, that the essentially psychotic process cannot be influenced by interpretation. The psychotic ego is weak in repression and so must deny and project, so that the therapeutic problem is not to resolve repressions but to strengthen the relation to external reality. I assume that paranoid types must be generally more accessible to psychotherapeutic methods and also that in these cases, the classical technique of interpretation in the latter part of the treatment, after a strong positive transference has been established, may play a certain rôle. This is because paranoid symptoms indicate the presence of neurotic mechanisms, which consist of conflicts between the wishes and the superego. I do not wish now to attempt to decide how much the original technique of interpretation can accomplish in such cases, after the analyst has succeeded in establishing a strong positive transference. This question can only be solved by systematic observation in psychiatric hospitals.

These theoretical considerations coincide with

the few empirical observations which we possess, and which show that paranoid cases are as a matter of fact more easily influenced by psychological means than other forms of schizophrenia. In the light of these considerations we are also able to explain why the psychoanalytic approach, I mean especially interpretations, might sometimes precipitate an acute episode. Interpretations always imply a burdening of the ego and force the patient to see either an unwelcome part of external reality or of his own personality. The weak and non-resistant psychotic ego reacts naturally to the insight forced upon him, by flight, denial and falsification.

I have tried by these few suggestions merely to indicate the possibility of employing psychoanalytic knowledge in the development of a method really adapted to the specific psychodynamic conditions of schizophrenics. If I have demonstrated no more than that in psychoses the simple and uncritical use of a treatment designed for neuroses is inappropriate, I have fulfilled my purpose. In outlining the general principles of a future technique for the treatment of psychoses I have avoided calling it a psychoanalytic

treatment and have used the more general expression, psychotherapy, in order to emphasize that what we usually call psychoanalytic treatment is especially adapted to the psychic condition of the neurotic. The new and modified technique, however, which I have tried to suggest here in very general outline, can only be based on psychoanalytic insight: Psychoanalysis is the name both for a therapy and for the theoretical knowledge of the mind.

CHAPTER IV

PSYCHOGENIC FACTORS IN ORGANIC DISEASES

IV. PSYCHOGENIC FACTORS IN ORGANIC DISEASES

THE superiority of analytic psychology in describing and explaining the details of psychopathological processes made it inevitable that its influence on modern psychiatry should ultimately be felt. The relations between psychoanalysis and general medicine, however, were much slower in developing. The discrepancy between the official medical attitude toward psychoanalysis and its actual rôle in general practice is becoming daily more obvious. While the medical schools officially regard psychoanalysis as a persistent but passing fad, or as a questionable and highly speculative system, not yet and probably never ripe for use in medicine, the general practitioner usually knows something about it and is influenced by it in his daily work. His

knowledge, however, was not obtained at the medical schools or universities but generally from hearsay and thus the paradoxical situation has arisen in the last two decades that although medical authorities officially do not take notice of psychoanalysis, there is a tendency in medical practice which might be called "psychologism." It is, however, impossible for knowledge acquired in so haphazard and unsystematic a manner to be sound, critical and well-balanced. It exhibits all manner of impurities and in general the practitioner has been the victim rather than the master of the situation. While some years ago psychogenic factors were considered as mythical concepts which had no place in an exact science, today the opposite attitude is characteristic of many modern practitioners, who like to detect psychogenic causes for everything. Not long ago, a physician had to be reminded that his patient had a personality and a mental life with difficult and important conflicts, but now some physicians must be reminded that besides mental problems there is also the complicated machinery of the body to be reckoned with. It is impossible to deny

that the dogmatic attitude of the medical schools is responsible for this uncritical, pan-psychological attitude, which is nothing but an exaggerated reaction against the preceding un-psychological period in medicine which refused to take notice of Freud's new science.

In 1930-1931 I was invited to teach Psychoanalysis in the University of Chicago and had ample opportunity to study the different attitudes of my medical colleagues toward this first attempt to bring psychoanalysis into contact with other medical disciplines. Their reactions appeared variously in stubborn refusal to take any notice of it, in prejudiced attacks, in open-minded but critical interest, and in enthusiastic coöperation. I cannot, therefore, agree with those analysts who are impatient or bitter about the resistance which psychoanalysis meets in medicine and who give up trying to convince their critics and retire in splendid isolation, content with the feeling that they know more about human nature than their stubborn antagonists. I do not think that they have any right to complain of the opposition to psychoanalysis, for it is a

typical, unavoidable phenomenon in the development of every science and has appeared repeatedly even in the brief history of scientific medicine whenever an important fundamental discovery has been made.

A few sketchy historical considerations may serve to explain the unstable position of psychoanalysis, which has become one of the most awkward problems of contemporary medical teaching and administration as well as a question of cardinal importance in medical and biological research. An examination of the situation from a detached historical point of view results in the impression that the appearance of psychoanalysis on the scientific scene is accompanied by all the signs of those rare moments when important scientific revolutions start. Psychoanalysis does not impress us merely as an important new method or as an isolated discovery, but as the beginning of a new phase in biological and medical thinking. Only its fundamental significance can explain the violent resistance it has evoked.

Earlier Views of the Psychogenesis of Organic Diseases

THE neglect of psychological facts, especially of the mental state of the patient, has not always been as prevalent in medicine as in the period from the middle of the last century up to the present. In the pre-scientific period, which may also be called the "pre-laboratory period," when medicine was more of an art than a science and was based more on intuition and on general rather than detailed empirical observations, the physician laid a much greater stress on the psychological state of the patient and attempted to explain disease not only as the consequence of pathological changes in the different organs, but as the consequence of the conditions of his whole life. In those days it was easy for the physician not to be one-sided and to consider all the pathological phenomena because he knew very few details, especially of the finer biological processes.

An echo of this attitude is found in the literature of those days which, for example, presented tuberculosis in a romantic fashion as a conse-

quence of great mental catastrophes, which led to flight from a life already judged worthless. In the course of time, the bacillus tuberculosis was discovered, and the natural effect of this was to regard all kinds of psychogenic etiological explanations as popular superstitions. Only quite recently has it been reaffirmed that a full etiological account even of an infectious disease like tuberculosis, which is caused by a highly specific microörganism, must reckon with psychological factors. Statistical investigation has proved that there is striking discrepancy between the amount of actual infection by Koch's bacillus and florid cases of tuberculosis. In view of the omnipresence of the bacillus tuberculosis in the great industrial centers, it has become a most interesting problem to discover the variable factors responsible for the fact that only a fraction of the persons infected becomes actually sick. In addition to constitution and acquired immunity, it has been necessary to assume that the psychological state of the individual exposed to infection is also a factor in his resistance to the disease. This is only one example of the recent change; credit is once more given to the old empirical

observation of the influence of psychological factors in disease.

No matter how important and correct this new psychological aspect, the evaluation of the patient's psychic condition, might be, it is easy to understand that the necessity of introducing this unknown and intangible factor was bound to annoy and discourage the modern physician. The patient's "psychological condition" is indeed an etiological concept which is not on the same scientific level as that of a well-defined microorganism or of the more or less measurable amount of the body's immunity against an infection. While the latter belong to the familiar field of natural science, the introduction of psychological factors was like a slap in the face to the biologically orientated physician, who was reminded of those days not long past when medicine was a branch of sorcery and therapy a form of exorcism. Scientific medicine is still young and only recently recognized as an exact natural science and is, therefore, particularly sensitive to the introduction of psychological concepts which appear similar to the animistic theories in which it was once entangled. The invasion of medicine

by psychology is felt by the majority to introduce an unknown factor, incapable of tangible and scientific definition and approach. The idea that the patient's "mental condition" may influence well defined physico-chemical processes is too general a notion to be considered seriously, and even if it be described more specifically as nervousness, worry, or chronic fear and apprehension, still the causal connection between these phenomena and the tangible physiological processes is very unsatisfactory.

The fundamental significance of psychoanalysis consists just in filling this gap by replacing psychological generalities like "the patient's mental condition" by well defined, highly specific, empirical and detailed psychological observation. Thus psychoanalysis eliminates the difference of scientific character between psychological and physical facts.

The history of medicine is full of indications that certain connections between psychological and physiological processes were perceived intuitively from general observation even in the pre-scientific period. The majority of these guesses still await a scientific explanation as, for

example, the old Galenic conception of the temperaments which has been revived in modern constitutional research, especially in the works of Kretschmer. Old and vague notions of a connection of mental disturbances and glandular functions betray themselves in expressions like "melancholia" (black bile). But it is noteworthy that in this field even the modern clinician can only make general statements, for example, that certain people with a peculiar physical structure, whom Kretschmer called "pyknic" types, exhibit an unexplained inclination toward disturbances in the functions of the great visceral glands and at the same time toward melancholic states. The intimate nature of this coincidence is by no means clarified and we do not know whether it is the result of a third unknown factor or whether the melancholic process is responsible for the pathological functioning of certain glands.

Balzac's "Cousin Pons" is a unique literary document which reflects the medical thinking of its time. It is the story of an odd bachelor, Pons, an eccentric collector of pictures, and a gourmand, who dies of a gall bladder affection, having developed a severe form of melancholia. Cousin

Pons is a classical representative of the type of personality later presented by Freud, Abraham, Jones and other psychoanalysts in scientific terms, a case which we psychoanalysts would call a combination of "anal" and "oral" character. He also belongs, according to Kretschmer's classification, to the pyknic type. The novel is nothing but the case history of melancholia with a subsequent gall bladder disturbance which was the last act in the drama of the mental breakdown of this eccentric character. The extraordinary intuition of Balzac has created here an imaginative case history, which a general practitioner, whose experience is not limited to laboratory tests, would call typical.

The life of Pons consisted, apart from collecting antique objects of art, in the satisfaction of his gourmanderie. He was the regular guest of his rich relatives, who belonged to the mondaine society of Paris and who rewarded him with dinner invitations for his expert opinion in purchasing valuable works of art. Once, after an elaborate dinner in the house of a relative, he overheard the servants calling him an old parasite

and in that moment saw himself objectively, understood his undignified, senseless existence, and decided never to accept an invitation again. He kept his resolution, retired into seclusion and lived an ascetic, lonesome life. In giving up the visits to his relatives he relinquished the last tie to the external world, and his only form of physical satisfaction. Henceforth the emptiness of his bachelor existence became unbearable and he developed melancholia.

The striking effect of this story on the psychoanalyst can only be understood by knowing that Karl Abraham was able to trace the disposition toward melancholic depressions to a fixation on the early satisfactions of the suckling period.[1] After a masterful presentation of the symptoms of melancholia, Balzac has his hero develop a disturbance of the gall bladder which resulted in his death. The author tries to impress us that the organic illness was the last and necessary consequence of the mental breakdown of Cousin Pons and we have to admit that the coincidence

[1] Karl Abraham: "Versuch einer Entwicklungsgeschichte der Libido auf Grund der Psychoanalyse seelischer Storungen," Internationaler Psychoanalytischer Verlag, Wien, 1924.

of the triad—oral fixation, melancholia, and gall bladder affection—agrees with clinical observation.

I mention this masterpiece not to draw any medical conclusions from an invented case history, although it is, like all great products of art, a striking condensation of many detailed observations, a kind of concentrated reality. What I want to illustrate is that in general medicine case histories of this kind containing relevant etiological factors belonging to personality development are wholly lacking. Modern case reports are considered complete if they enumerate physical and chemical data, some of which are either not relevant or at least not known to be relevant to the case, and I venture to say that modern case histories in internal medicine are as incomplete in not knowing and not reporting relevant etiological factors connected with personality development, as Balzac's is in not giving the biological facts.

The Resistance Against Psychogenic Factors in Modern Medicine

I HOPE that my reference to certain fundamental defects of the modern clinical approach will not be misunderstood. I do not wish to minimize the results of the "laboratory period," which without doubt has been the most brilliant period in the history of medicine, and which in the second part of the last century has made medicine a natural science in the real sense of the word. All progress, however, is necessarily one-sided. The physico-chemical orientation in medicine is unquestionably responsible for great progress, but it is also responsible for the complete neglect of the psychological point of view. Its philosophical postulate has been the expectation that in a not very far distant future, the body and its functions will be understood as a physico-chemical machine. The introduction of psychological factors to explain physical processes seemed to contradict this postulate. I do not doubt that the assumption of a complete physico-chemical causality of biological processes is correct, but I do not be-

lieve that a *knowledge* of the interplay of physiological and psychological processes interferes with it in the least.

The resistance to psychological considerations in contemporary biology is a typical phenomenon in the history of thought. It is the inhibiting power of tradition opposing development. Ernst Mach, the great Austrian physicist and philosopher, a forerunner of dynamic psychology, described this general phenomenon in his classical presentations of the history of thermodynamics and mechanics as the inhibiting influence of "inveterate habits of thought." It is inertia of thinking resisting the adjustment of old ideas to new discoveries. Just as in physics the mechanistic attempt to reduce all physical phenomena to the motions of corpuscula once inhibited the development of more general electro-dynamic concepts, the exclusively physico-chemical point of view in medicine interferes with progress in the investigation of psychological processes. It is a paradox of history that the greater the merits of a traditional attitude, the greater is its retarding influence. It is a natural inclination to stick to

ideas which have proved successful and to overlook or even deny facts which seem to endanger old and valuable concepts. It is, therefore, not surprising that the successful physico-chemical tradition cannot tolerate the introduction of psychological concepts, which seem destructive of the exact basis of medicine.

Psychological Influences on the Body

STRONG and independent minds are needed to make progress against dogmatic opposition. It is a curious coincidence that the scientific revolution happened to start in Vienna, the strongest centre of the best laboratory tradition. The first move, however, came from France. Freud, a pupil of Brücke, the Viennese physiologist, and Meynert, the brain anatomist, was wholly dominated by the anatomical point of view when he first came to Paris to attend the lectures of Charcot (1887). Charcot was an empiricist in the best sense of the word. His great reverence for facts enabled him to emancipate himself from the prevailing dogmatic theories which gave no place to

psychological factors in the causation of pathological processes. After he had learned that hysterical symptoms, like the paresis of one arm, can arise under the influence of certain ideas, he succeeded in reproducing hysterical symptoms experimentally by the help of suggestions which he made to patients under hypnosis. These experiments have proved conclusively that psychological factors, such as ideas, can disturb the functions of organs morphologically intact. Hypnosis, having been introduced by an authority like Charcot, became a legitimate method of research, although in the minds of many physicians it is associated even today with medieval black magic, rather than with modern medicine. It does not suit modern medicine, which has more and more assumed the exterior of physics and chemistry, in which the technical instrument has undertaken leadership. Nevertheless, experiments in hypnosis by competent and critical investigators have resulted in the accumulation of a vast collection of facts which show that even the functions of those organs can be influenced by hypnotic suggestions which work automatically and have no apparent connection with ordinary

mental life. Most extraordinary has appeared the fact that even organs, the functions of which are not subject to conscious will, could be influenced by the hypnotist's commands; for example, the frequency of the heart contractions, or the blood supply of certain organs through circumscribed contraction of the capillaries, or the function of the perspiratory glands. It would seem that some of the unverified statements about Indian yogis, who by long and strenuous training voluntarily control physiological processes which are normally automatic, might be confirmed.

The Relation of the Autonomic Nervous System to the Central Nervous System

I MUST confess that I have never been able to explain satisfactorily the stubborn resistance which modern medicine maintains in the face of experimental proofs against the assumption of psychogenic disturbances of the organs, the functions of which are regulated by the autonomic nervous system. The connection of the cortex

with the visceral organs through the sympathetic and para-sympathetic system is sufficiently well known and this connection implies that essentially every peripheral physiological process, in whatever part of the body it takes place, can potentially be influenced by psychological factors. The mere fact that most organic functions are automatic and seemingly independent of psychological influences does not imply that under certain conditions cortical, i.e. psychological influences, cannot take place. There are, moreover, certain biological considerations which justify the assumption that voluntary innervations represent the primary form of motor innervation and that reflexes and automatic functions are products of a secondary development. We know that many reflectory or automatic functions are acquired, i.e. learned during the individual's lifetime. The adjustment of the organism to the environment consists chiefly in the automatization of those behavior patterns which prove to be the most suitable. To mention only one well known phenomenon, when a child learns to walk, he at first makes groping attempts at locomotion and ends by performing what is

almost an automatic function. It is true that walking, though automatic, remains subject to the conscious will, so that we can change the speed and length of our steps and consciously start and stop walking. The automatic functions of visceral organs, on the other hand, are usually inaccessible to voluntary interference, even though in unusual states like hypnosis influence by suggestion is possible. The question arises whether it is justified to consider this unusual voluntary influence as a reëstablishment of an archaic faculty, which has been lost in the course of phylogenetic development.

Phylogenetic considerations make it seem probable that the automatic regulation of organic functions is a secondary process and that the original behavior of the living protoplasm is a groping and voluntary motor innervation, such as we see in the behavior of monocellular organisms. If I use the expression "voluntary" in this case, it is only because we have no other term for the primitive equivalent of psychological impulses in primitive beings corresponding to the conscious will of highly developed organisms. That psychological impulses cannot be regarded

the privilege of the higher vertebrates, or dependent upon a certain stage in the biological development, is so obvious a philosophical postulate that its further discussion is superfluous.

In primitive monocellular organisms, even the vegetative functions are not yet consolidated, and organs such as the arm and mouth are created *ad hoc* only for the moment and disappear after their function has been fulfilled in conformity with the undifferentiated protoplasmatic body. Thus the body and its different organs can be considered as structuralized and solidified functions or, in other words, the function is the formative factor and is responsible for the morphological structure.[1] The differentiation and automatization of the vegetative organ functions is a long process of the adjustment of the race to the biological processes which the organisms have to solve and the differentiation of the so-called autonomic nervous system which regulates the functions of the vegetative organs has

[1] This essentially Lamarckian concept was repeatedly discussed in the psychoanalytic literature, but most ingeniously by S. Ferenczi in his "Versuch einer Genitaltheorie" (Int. Psychoanal. Vg, Vienna, 1924). Dr. G. Zilboorg called my attention to the behavior of the monocellular beings as the best illustration of the dynamic creation of organs.

to be considered as a secondary process. The original biological structure was a uniform nervous control which had the task both of orientation to the external world and the regulation of inner processes. The development of an autonomic nervous system which is to a certain degree independent of the central nervous system is a product of development and serves to unburden the central nervous system of part of its work. This division of labor, in coping with the two fundamental problems of the organism, the orientation in the external world and the regulation of the inner processes, increases the efficiency of the organism. The central nervous system, relieved of the task of inner regulation, becomes more efficient in solving the problems of orientation in external reality. An entire independence of the autonomic nervous system from the central nervous system is, however, not realized in the human body. There is a complicated interrelation between the autonomic ganglia and the central nervous system, and all visceral organs receive nerve fibres both from central origin and from sympathetic ganglia which lie outside of the central nervous system. Therefore the concept of the

autonomic nervous system is much more functional than anatomical, because morphologically they are closely interrelated and the innervation of the inner organs is always mixed.

Dr. Edward G. Kempf, in his book, "The Autonomic Functions and the Personality," [1] comes to a seemingly entirely opposite conclusion, namely, that the autonomic nervous system is the primary structure around which the cerebrospinal system has been constructed in the course of development. Dealing with this problem, however, one has to separate two distinct questions: (1) The relation of the two basic functions of the organism, the regulation of the vegetative functions (inner affairs of the organism), and the orientation in the environment (external affairs). (2) The question of the *kind* of nervous control, i.e. central (voluntary) and autonomic (involuntary) nervous control. Kempf evidently deals with the first question in making the assumption that the nervous control of the vegetative functions, i.e. the internal affairs of the organism, is organized first and that the orien-

[1] Edward G. Kempf. "The Autonomic Functions and the Personality," Nervous and Mental Disease Monograph Series, No. 28. Washington, 1918.

tation and reactions to the external environment by the help of a "proficient sensory-motor system" is a secondary process. We are not, however, concerned here with the problem of whether the nervous control of the vegetative functions or that of the orientation in the environment has developed earlier; but we ask only which *kind* of nervous control, the central or autonomic, is primary. My assumption is that at an early stage of development probably both the vegetative functions and the orientation in the environment were not yet anatomically differentiated but controlled by a single central system. The morphological manifestation of the later differentiation would be, according to this concept, the peripheral migration of the sympathetic ganglia. Embryological studies have shown that originally the sympathetic motor (excitor) cells lie within the central nervous system close up to the posterior root ganglia and that only later do they migrate outwards peripherally.[1] Thus the morphological separation of the autonomic and central nervous systems, which is—to be sure—not a

[1] Samson Wright: "Applied Physiology," p. 95. Oxford Medical Publications, Humphrey Milford, London, 1926.

complete separation, is a result of development. Also, Kempf assumes that the differentiation of both systems progresses during development. But it is meaningless, it seems to me, to speak of an autonomic system before a central system has been established, since autonomy implies a central government from which certain functions are separated and carried out more or less independently from the central control. The question is, whether or not the autonomic nervous control of the vegetative functions—partially separated as it is both functionally and morphologically from the central system—is a result of later differentiation. That the need for autonomy in all kinds of organizations arises later in development when the central control becomes too complex is a general principle of biological development. The question whether Kempf's theory of the primacy of the nervous control of the vegetative functions, to which he really refers in his developmental theory, is justified or not lies outside of the scope of this book.

The question whether the autonomic nervous system can be considered as a differentiated product of the central nervous system can be

finally decided only by embryological investigation. Although the origin of the autonomic ganglia is not yet entirely clear, the major part of their neurons seems to develop from the ventral (motor) part of the neural tube. But it is not finally established whether the cells which become differentiated into autonomic neurons actually descend from the cerebro-spinal nervous system. According to the theory of Schaper,[1] they come from so-called "indifferent" cells which produce the specific cell elements of the nervous system. On the other hand, if one considers the fact that the ganglia of the sympathetic trunks are commonly regarded as efferent (motor) in function ("excitor cells"), one cannot escape the impression that the extra cerebro-spinal autonomic centers are peripherally displaced motor centers.[2] This displacement is the

[1] A. Schaper: "Die fruhesten Differenzierungsvorgänge im Zentralnervensystem. Kritische Studie und Versuch einer Geschichte der Entwickelung nervoser Substanz." Arch. f. Entw.-Mech., 5, 81-132. (Quoted from "The Autonomic Nervous System," by Albert Kuntz, p. 521. Lea & Febiger, Philadelphia, 1929.)

[2] For example, J. B. Johnston considers entirely settled that the sympathetic system is a developmental product of the central nervous system in stating that, regardless of some unsettled theoretical questions as to the origin of the sympathetic neurons, "it should be held clearly in mind that the sympathetic system is an offshoot or subsidiary portion of the visceral afferent

manifestation of the physiological tendency to give internal organs an increasingly higher grade of motor autonomy. The only real autonomic functions are those of the peripheral ganglia of the heart and the submucous ganglia of the intestinal canal. Naturally these organs are at the same time subject to central influences through the sympathetic and the para-sympathetic nervous system. Further embryological study of the origin of the autonomic ganglia would be of the highest theoretical value.

Thus, both psychological and somatic considerations support the assumption that hysterical mechanisms, in which organs with automatic regulations are influenced by psychological motives, can be regarded as archaic processes, in which the organism regresses to a lost faculty of controlling all organic functions in the same way as we control our voluntary muscles, i.e. through psychological (cortical) influences. That this faculty can be relearned to a certain

and efferent divisions of the nervous system which has come to have a special structure and arrangement owing to the conditions of visceral activities." J. B. Johnston: "The Nervous System of Vertebrates," p. 216. P. Blakiston's Son & Co., Philadelphia, 1906.

degree by training is made probable by the practices of the yogis in India which, however, have unfortunately never been subjected—so far as I know—to critical and systematic investigation.[1]

Even if we disregard the question of the philogenetic primacy of central and autonomic innervations, it remains a fact that the major part of our biological accomplishments consists in expressing and satisfying psychological needs, wishes and emotions, through motor innervations, no matter whether this physical expression of psychic facts consists in complicated movements of our extremities in carrying out the tasks of everyday life, or whether melancholy ideas influence the secretion of the lachrymal sac, or whether under the influence of strong emotions such as pleasure or fear, our heart begins to beat more rapidly, our cheeks become red or pale, and at the same time the distribution of the blood supply is probably changed in all the organs.

[1] *Cf.* The therapeutic method of I. H. Schultz (Berlin) which he calls "Autogener Training" is essentially based on the yogi method of extending the field of voluntary innervations through systematic training.

Recognition of Psychic Factors in Modern Medicine

In recent years, there has been an increasing tendency in medicine to take account of psychological influences in the origin of certain cryptogenic diseases, i.e. of disturbances the origin of which is not yet discovered. My purpose is not to give a review of all etiological attempts of this kind, for we are here interested only in principles. I take, therefore, for illustration only one example, the etiology of peptic ulcers. A variety of etiological factors has been established here but no way has yet been found to determine their relative importance and interrelation.

(1) Hyper-acidity, i.e. an increase of the secretion of hydrochloric acid, (2) erosions in the mucous membrane covering the stomach and duodenum, (3) disturbances of the blood supply of these mucous membranes, can be cited as well-established factors. Probably all of these are factors. Chronic increased secretion of hydrochloric acid in connection with small erosions of the

mucous membrane, or diminished resistance of the latter resulting from the local contraction of blood vessels which are nourishing the mucous membranes, may become harmful to the tissue of the stomach. With the determination of these etiological factors, however, the problem is not solved, but only removed one stage to the cause of the *chronic* hyper-secretion of the hydrochloric acid, or of the *chronic* local contraction of the supplying blood vessels. The history of many cases shows that gastric ulcer is usually preceded by chronic gastritis frequently lasting many years. The etiological problem is consequently to find the cause of the chronic gastritis. The fact that a change in diet cannot cure the majority of cases militates against the assumption that faulty diet is the usual or general causative factor. Investigators, therefore, have from time to time taken up the idea of central, i.e. nervous influences, as responsible for the hyper-acidity as well as the changes in the blood supply of the stomach.[1]

[1] Arvid Lindau, in a recent address at the Harvard Medical Society, in enumerating the different factors which might play a rôle in the production of ulcers, mentions in the first place super-secretion of nervous origin either psychic or due to organic brain

Harvey Cushing[1] has recently observed that in a few cases acute perforation of the stomach followed brain operations. He assumes that the physiological changes in the stomach leading to perforation are the effects of para-sympathetic stimulation of the mid-brain centers caused by the operation.

Richard U. Light,[2] following Cushing's suggestions, has been able to produce by pharmacological stimulation (pilocarpine) of the para-sympathetic nerves, peptic ulcers. According to him the para-sympathetic irritation causes local anemia of the stomach which leads to ulcer by diminishing the resistance of the stomach wall to its own product, gastric juice.

These observations make it probable that at least some cases of gastric ulcer may have not a local but a central origin. It appears established

lesions. "The New England Journal of Medicine," Vol. 205, no. 20, 1931, p 978

Cf. Fritz Fleischer: "Wesen, Diagnose und Therapie des Ulcus Ventriculi," pp 345-346. Brugsch Ergebnisse der Gesammten Medizin. Urbann Schwarzennberg, Berlin, 1921.

[1] Dr. Harvey Cushing: "The Possible Relation of the Central (Vegetative) Nervous System to Peptic Ulcers." New England Journal of Medicine, Vol. 205, no. 20, p. 979, 1931.

[2] Dr. Richard U. Light: "Experimental Observations on the Production of Ulcers by Pilocarpine." New England Journal of Medicine, Vol. 205, no. 20, p. 980, 1931.

that chronic irritation of sub-cortical centers in the brain is able to influence both of the local factors: the secretion of acid and the blood supply of the stomach wall. Theoretically, both changes, the hyper-secretion of acid or the undernourishment may be responsible for the development of ulcers. The stomach through local anemia is weakened in its resistance against even normal concentration of acid, or chronic hyper-acidity may afflict the stomach, even though its resistance is not specifically diminished. Although it is not yet clearly established whether the coincidence of both factors is necessary or one alone is sufficient to produce ulcers, it is sufficiently proven that both of the local factors can arise under nervous influences.

The clinical observations of Cushing and the experimental observations of Light both point to the sub-cortical centers as the origin of this nervous influence. Further etiological investigation must now decide the question of the cause of the irritation of the sub-cortical centers regulating the secretive functions and the blood supply of the stomach. In the cases observed by Cushing, this irritation was due to the mechanical

fact of the operation, but in the majority of cases, the irritation of the sub-cortical centers must have some other and more usual origin.

Analysis of Psychogenic Factors

THE next possibility is that the sub-cortical irritation is due to cortical influences, i.e. psychological influences upon the vegetative centers of the mid-brain. Psychoanalytic experiences confirm this assumption. Many cases of chronic gastritis come to the psychoanalyst with a long history of previous medical diagnoses and treatment. Usually they are called cases of "stomach neuroses," but in some an incipient peptic ulcer is undeniably present. Hyper-acidity and typical pains have usually been chronic for years, although the requirements of a clear-cut diagnosis of gastric ulcer are not always fulfilled. Analytic investigation reveals in these cases a characteristic regression to the early stages of emotional life. Thus, in one of my cases, a strong desire for dependence on others, the wish to be loved and taken care of, was present but repressed by the

conscious ego, which was dominated by the masculine ideas of independence, success and activity. The repressed, passive wishes, denied expression by the conscious personality, found a motor expression in the stomach symptoms.

This middle-aged married man, a father of children, suffered for more than fifteen years from chronic gastritis and at one time even an incipient peptic ulcer was diagnosed. Operation was not undertaken, but he was treated with all kinds of dietetic and pharmacological methods without any permanent effect. I undertook an analysis, which soon revealed a strong but repressed wish to be loved and treated by his wife as an infant. The dependence of the patient's chronic stomach symptoms upon these emotions was well established through observation over many months and the connection became—as is the rule in psychoanalytic treatment—especially evident after the patient had transferred his feelings of dependence to the analyst. The analytic situation allowed him to realize dependence much more than was possible in real life, in his attitude toward his wife. In this period of the "transference neurosis," the stomach symptoms disappeared,

for the underlying emotion found symbolic gratification in the analytic situation. The symptoms recurred, however, when the first attempts were made to force him to see that the analysis served to gratify his infantile dependence. When this was perceived, the infantile craving was again repressed and had to be gratified once more in the old way of motor relief in stomach symptoms.

To the physician trained in the somatic way of regarding cases, it may at first seem strange that an infantile craving such as the wish to be taken care of as one was in infancy should lead to a disturbance of the stomach functions. The analytically-trained observer, however, will not find it difficult to understand the mechanism by which the longing for dependence becomes converted into or expressed by innervations of the stomach. The first dependent situation is on the mother's breast; the first form of being cared for and loved is the nursing; the first pleasurable sensations satisfying this kind of passive-receptive tendencies are experienced in the nutrition. Since the first situation in which one feels loved and taken care of is nursing, the sensations of *being loved* and *being fed* become emotionally

associated for the rest of life.[1] If the wish to be loved as one was loved by the mother is not only denied gratification, but repressed, i.e. excluded even from consciousness, it mobilizes the associated tendency for being nourished. Knowing from Pavlov's studies the dependence of the secretive functions of the stomach upon psychological stimuli, we understand that the permanent unconscious longing for dependence and being loved in an infantile way can exert a chronic stimulation of the stomach secretion, the result of which may be chronic hyper-acidity. The stomach, exposed to a permanent psychic stimulus (unconscious phantasies of being fed), behaves even when it is empty as if it were in a state of digestion and thus is exposed all the time to the influence of the gastric juice. But in this situation a chronic hyper-acidity rests on a nervous basis. In this way, psychoanalysis is able to give the expression, "nervous basis," a more con-

[1] The intuitive knowledge of this emotional connection between being loved and being fed is expressed in the German proverb, "Die Liebe geht durch den Magen" (Love goes through the stomach). The first woman, Eve, with female intuition, seduced Adam by giving him something to eat. Moreover, the apple is a general symbol for the breast (Brustapfel = breast apple, is the common German expression for breast).

crete content by discovering the detailed psychic stimuli, the unconscious tendencies, which are frequently responsible for the permanent disturbance of certain organic functions.

If I mention that in the case discussed above once the analysis had made conscious the repressed infantile tendencies, the stomach symptoms entirely and permanently disappeared, I do so not because I consider a therapeutic result the equivalent of scientific proof. I know only too well that psychogenic symptoms can be influenced by suggestion, but in a long psychoanalysis we are able to observe the intimate connection between the psychological situation and the organic symptoms. In this case, for example, it was very instructive to observe during the analysis how the periodic resistance of the patient to admitting his passive wishes toward his wife and later toward the analyst led to new repressions and the consequent stomach symptoms.

I am aware of the fact that without the full details of many cases these statements are not convincing enough and I present here only one of several similar cases which have come under my observation. But even full details are not a

substitute for direct observation. Even a complicated surgical situation can hardly be adequately described, and such a description is never the equivalent of direct experience. Psychological description, however, is far more difficult and direct observation is absolutely necessary. The purpose of this short reference to clinical material is merely to give an approximate idea of the specific nature of the unconscious tendencies which produce a specific organic symptom.

The knowledge of the causative psychic factors which may lead to a chronic hyper-secretion does not suffice for a complete etiology of peptic ulcers. It remains to investigate under what conditions a nervous hyper-secretion may lead to organic changes such as a peptic ulcer. Only thorough clinical experience which simultaneously utilizes both the analytical and the somatic approach will be able to answer this question. The fact that the peptic ulcer itself is the end result of a long and complicated chain of causes makes it probable that different cases have a different etiology. Cushing's experience shows that the central irritation in certain unusual cases has its origin in sub-cortical centers

but not necessarily in the cortex itself. In psychogenic cases, the psychoanalytic therapy attacks the first of a long chain of causative factors which can be described as follows: (1) chronic psychic stimulus (in the investigated case, for example, the wish for dependence); (2) irritation of the sub-cortical center through the psychic stimulus described in (1); (3) local changes of a functional nature in the stomach itself, for example, hyper-acidity or changes in the blood supply as a result of the sub-cortical irritation; (4) morphological changes under the influence of the chronic dysfunction (hyper-acidity, etc.): peptic ulcer. In cases which follow this etiological scheme only psychoanalysis can be considered as an etiological therapy, because all somatic methods can only influence one of the intermediary factors. On the other hand, this therapy is really effective only during the functional stage of the disease, for after an ulcer has already developed local therapy is usually unavoidable. Thus, analytic therapy is preventive and should be undertaken in all cases of chronic gastritis having a central origin.

Just as the passive wish for being loved as in infancy may influence the functions of the stom-

ach, repressed fears or unconscious apprehensions may produce heart symptoms through the influence of fear upon the blood circulation. Another typical connection is between spite and extreme desire for independence and chronic constipation, the regulation of the excretory functions being one of the first educational interferences with the child when its early coprophilic tendencies are broken by training in cleanliness.

Thus, chronic constipation is often an expression of the patient's spiteful attitude toward his environment.

A young woman, married for two years, suffered from chronic constipation since the beginning of her marriage. Daily enemas were used all the time. Repeated physical examinations were always negative. Before I started the analysis, the patient was observed for several days in a hospital for internal disturbances and the report was: "organic examination negative, nervous constipation." The analysis revealed the following situation.

The young woman entered upon marriage expecting great love and tenderness. Her husband was an artist, whose chief interest was in his profession. He was entirely blind to the emotional

needs of a young woman and continued a kind of bachelor existence after his marriage. The young wife had a great conscious longing for a child, but her husband refused it categorically from financial considerations and because he wanted to devote himself entirely to his art and did not want to be disturbed by increased financial and emotional responsibilities. The analysis for a long time did not give any specific clue to the symptom, although it was rather obvious that somehow it was connected with the woman's emotional reaction to her husband's behavior. In order to have my own impression of the husband and to control the objectivity of the patient's picture of her husband, I asked him to come to see me. This meeting entirely corroborated the patient's description. He made the impression of an interesting but entirely self-centered young man who was entirely naïve and inexperienced in all female affairs. He was absolutely unable to understand my statement that his wife was basically dissatisfied with her marriage, although she herself did not want to realize this. Manifest signs of her dissatisfaction were absent, because the patient tried to deceive herself in this respect and repressed her dissatisfaction as much as was possible. She lived in the illusion of being happily married and never expressed any direct com-

plaint against her husband. When she said something which sounded like an accusation against him, she did it in a humorous way, as if it was a trifle not worth mentioning. To explain to the husband his lack of attention to his wife, I used an example which the patient had given me in characterizing their marital life, that since the first day of their marriage the husband never brought any small sign of attention to the house, flowers or anything else. It seems that our interview made a deep impression on the husband, and he left my office with a guilty conscience. The next day the patient reported in the analysis that she had a spontaneous bowel movement before she took her daily enema, the first time for two years. Seemingly, without any connection, she also reported in the same session that her husband for the first time in their married life had brought home a beautiful bouquet of flowers. The cathartic influence of these flowers was indeed amusing and gave us the first clue to the psychic background of the symptom. This woman had used an infantile way of expressing spite towards her husband as an answer to his loveless behavior. The psychology of early childhood knows very well this kind of infantile behavior. The small child considers the excrements as his first possession and very often uses the ex-

cremental functions to express his emotions towards the environment. During the training for cleanliness, the adults, in order to teach the child regularity, try to overcome the infantile stubbornness by promising rewards such as sweets and other gifts for correct behavior. In the vocabulary of every mother one finds the expression, "If you do it nicely, then you will get so and so." Thus the child learns very soon to consider the excrement as something which can be exchanged for other values, while their retention expresses the opposite, namely spite and stubbornness. As if the child would say, "If you do not give me what I expect from you, I will keep it back." The constipation of the patient was an infantile reaction which she did not want to admit to herself and which she never had shown openly. She expressed in this concealed and infantile way her resentment against the loveless attitude of her husband. And indeed, the first time her husband was generous, she also became generous and gave up her obstinacy, i.e. her constipation, which started a few weeks after her marriage. A further analysis revealed that upon this early infantile nucleus of spite there was superimposed another motivation, namely, the wish for getting pregnant. The constipation was also a reaction to her husband's denial to have a child. The un-

conscious identification of child and excrement—well-known to every trained analyst—was the basis of this reaction. The constipation surrendered in a relatively short analysis to this insight. She could not deceive herself longer about her deep dissatisfaction with her husband's behavior, but since her resentment became conscious there was no need to express it in this concealed and, for an adult, unusual way. She had now to face consciously her marital problem. After the analysis was finished, I had occasion to control the permanency of this cure for five years, during which the constipation has not returned. The fact that a few years after her cure she had a child probably contributed to the permanency of this therapeutic success.

The purpose of this writing, however, is not to give a full account of all the usual and possible psycho-physiological interrelations, but to show in general outlines how psychoanalytic research is able to give a specific, empirically founded content to the vague concept of "functional disturbances with psychic origin." [1] At present, mod-

[1] Cf. William A. White: "Medical Psychology," p 132 Nervous and Mental Disease Monograph Series No. 54, New York, 1931. "The fact that there is a psychological factor in connection with all disease seems to be inevitable if the theory of what

ern medicine is more inclined to take into account psychic stimuli and even to recognize their omnipresence and fundamental importance for certain functional disturbances, but the concept of the psychic stimulus remains an empty generality if its intimate nature is unknown. In the general form, however, the modern physician is more inclined to accept the psychic causation of some symptoms, but shows resistance and skepticism if the psychoanalyst tells him about specific wishes, strivings, fears, etc., which are the primary cause of so many functional and even organic diseases.[1] The only way, however, to

constitutes psychological reaction developed in this book is accepted. The specificity of the reaction, however, is the particular thing that now calls for explanation and elucidation. That there is such a specific correlation seems inevitable but to define it undoubtedly presents one of the most difficult problems of medicine.'

[1] This increasing interest of physiologists in psychic factors is best reflected in the experimental studies of W. B. Cannon on the influence of emotions upon organic processes. (W. B. Cannon: "Bodily Changes in Pain, Hunger, Fear and Rage," page 264. 2nd edit. D. Appleton and Company, New York, 1929.) But even in this excellent study the discrepancy between the specificity of the physiological data described and the generality of psychological facts and ideas is very obvious. The author's apparent unfamiliarity with the details of psychic, especially unconscious, phenomena becomes most manifest in his discussion of clinical cases and therapy ". . the *occasion* for worries, anxieties, conflicts, hatreds, resentments, and other forms of fear and anger, which affect the thalamic centers, must be removed. In short, the factors in the whole situation which are the source of strong feeling must be discovered and either explained away

prove the statement of psychoanalysts is to look into the psychological microscope, i.e. to undertake the long and painstaking investigation of patients according to the prescriptions of the psychoanalytic technique. Philosophical arguments, that a wish to be loved by one's own wife in an infantile way cannot possibly produce indigestion and stomach pains, which are based on physico-chemical processes, are futile and unscientific. The unusual nature of a phenomenon is no proof against its existence, and because we do not know the detailed mechanism of a causal connection between two facts does not justify its denial. The fact that longing to be loved like an infant occasionally produces stomach symptoms or repressed spite may cause constipation is no more mystical than laughter, i.e. the convulsive contraction of the diaphragm and laryngeal muscles as a result of seeing a comic situation or hearing a good anecdote.

In many cases even of organic diseases, a complete case history which claims to give a full

or eliminated" (p. 264). In this remark the over-simplification and the lack of any reference to the real therapeutic problems, with which the elaborate technique of psychoanalysis has to cope, show that the author is either not informed of the results of modern psychotherapy or does not want to give credit to them.

etiological explanation has to contain besides the usual somatic data gained in the medical laboratories details of facts regarding the development of the patient's personality and his psychological situation. Only these data can give us an account of those specific repressed tendencies, which in time may lead to tangible morphological changes in the organs, although for a long time they may have caused merely functional disturbances. The etiological formula of many organic disturbances follows this scheme: chronic psychic stimulus (repressed tendency)—functional disturbance—organic (morphological) changes.

The desire that in the future the knowledge of psychological factors should be substituted by the knowledge of the corresponding physiological processes of the brain is a respectable one, but so long as it is only a desire, it does not substitute for the actual knowledge of the relation of psychic facts and physiological processes. The abundant hypothetical assumptions about unknown cellular processes in the brain, which a German physiologist appropriately has called "brain mythology," cannot replace well-known psychic facts. Preferring such histological phantasies to

psychological facts is like substituting hopes of the future for exact observations which we have in the present. Moreover, it is a great question whether even an accurate notion of the cortical processes which accompany psychological phenomena will ever be able to account for the complicated relations of the individual to his environment as clearly as psychological understanding. I think, therefore, that even when we possess the knowledge of the complete physiological causality of biological processes, we shall not be willing to dispense with psychological insight into the functioning of the mental apparatus.

CHAPTER V

PSYCHOANALYSIS IN MEDICAL EDUCATION

V. PSYCHOANALYSIS IN MEDICAL EDUCATION

THE reader should now understand why psychoanalysis has had to become so awkward a problem in medicine. In the long run, it is an impossible situation that a theory which furnishes a better understanding of many diseases than has been previously possible and a therapy which is not only able to cure symptoms, but to give a scientific account of their origin and nature, should be entirely disregarded. If it is true that ailments like certain forms of chronic gastritis and constipation or functional heart trouble can be better understood and cured with greater success than with previous methods, which in such cases have quite generally failed, then psychoanalysis must become an integral part of medicine and must become part of the physician's education. The only way to avoid

this conclusion is either to deny the achievements of psychoanalysis, or, what is more usual, to refuse to take notice of it.

Any other course necessitates a radical change in medical education and involves either admitting that the medical student should know the structure and functioning of the personality as well as anatomy and physiology, or acknowledging the psychological approach to organic disturbances as valuable but distinct. This attitude would preserve the homogeneous physico-chemical basis of modern medicine without doing injustice to psychoanalysis. If such a division of the somatic and psychological approaches were admitted, medical therapy and psychotherapy would become two different professions and the physician could save his field from an invasion by psychology. It is, however, evident that even if such a division were practicable, the physician ought to know the fundamentals of psychoanalysis and the psychotherapists the principles of general pathology.

Freud inclines to the second solution in his book on "Lay-Analysis," but I feel that no argument can be entirely convincing with the little

experience we have to go on. There are no doubt good psychotherapists who have had no thorough medical training and background and good physicians who are unacquainted with psychoanalysis, but "good" is a relative word, and the possibility of increasing the efficiency of the psychotherapists with medical knowledge and that of the physician by analytic training should not be neglected. I have become recently more and more convinced that the separation of the psychological and somatic approaches is artificial, out-of-date, and contradicts the philosophical postulate that biological systems are psycho-biological entities. This postulate, however, agrees best with our present knowledge of biological systems. I would consider it tactless to guess at Freud's subjective reasons for wishing his own creation to remain separate from medicine if his motives did not have so profoundly human a justification. There is no question that Freud deeply resents the refusal of medicine to appreciate his life work. The laughter with which the young Freud was received in the medical association in Vienna when he returned from Paris and reported his new experiences with Charcot,

will remain always a classical example of the dogmatic attitude of medicine toward its great representatives, and reminds one of the reception of Harvey's, Pasteur's and Semmelweis' discoveries by their contemporaries. Freud's resentment towards academic medicine is a reflection of his own bitter experience. Science, however, is impersonal and its development is independent of the fate of individuals. Medicine cannot avoid adopting psychoanalytic theory and methods and his followers must hope that Freud may witness the practical coöperation of psychoanalysis and medicine.

The experiment at the University of Chicago of introducing a psychoanalyst into the medical faculty will be followed by others and their success will grow with the increasing desire of the medical profession to be informed of the details of psychoanalytic research.

There are, however, certain practical difficulties in the way. As long as teaching and research in psychoanalysis remain the private affair of a relatively small group of trained psychoanalysts, difficulty will be experienced in organization of

education and in the making of detailed reports and special studies.

A few practical suggestions on the inclusion of psychoanalytic training in medical schools may now be added.

In introducing a new discipline, we do not have to cope with traditional habits and can, therefore, follow a purely logical and systematic plan. Training in psychoanalysis has been carried on in the past outside the medical schools and universities—in the three Psychoanalytic Institutes of Vienna, Berlin, and London.[1] The students of these Institutes are for the most part medical students and physicians, especially psychiatrists, social workers, students of education, and in recent years lawyers, especially criminologists. An intelligent combination of their original studies with psychoanalytic training was, however, impossible, since the Psychoanalytic Institutes had no official connection with recognized academic schools. These Institutes live an isolated exist-

[1] Recently Psychoanalytic Institutes were opened also in Budapest and in New York. The first Psychoanalytic Institute was founded by Dr. Max Eitingon in Berlin in 1920. In the course of ten years he has developed it into a real Academy of Psychoanalysis and all the younger Institutes have adopted his principles of organization.

ence, which has had the single advantage that they have been undisturbed by external interference and could teach their own principles without compromise. The isolation of the Psychoanalytic Institutes arises not only from historical circumstances, but from the nature of psychoanalysis itself.

As a psychological theory, psychoanalysis became relevant to all disciplines dealing with the human mind. It occupies a central position in psychological science similar to that of chemistry in the natural sciences. Chemistry is needed in medicine, in technology, in agriculture, but no one would consider chemistry as a part of medicine, agriculture, or technology. Similarly, a knowledge of the psychological structure and functions of the mind is just as important for anthropology, sociology, criminology, esthetics, philology, and history as for the understanding and treatment of mental diseases. Therefore psychoanalysis cannot be considered a part of medicine or psychiatry, because of its more general nature. Psychoanalytic institutes as scientific and educational units will not be superfluous

even if psychoanalysis becomes a part of regular medical training.

A knowledge of the development and functions of the mind became important for psychiatry once it was empirically established that most mental disturbances, apart from constitutional factors, are determined by the psychological experiences of post-natal development. The detailed study of the influences affecting the development of the personality by highly refined and specifically adjusted methods of investigation is almost exclusively the accomplishment of Freud and his school.

A recent and extremely valuable addition, however, to this field has been made chiefly under the influence of William Healy. This contribution of American psychiatry, appropriately called "social psychiatry," has developed a new instrument in psychiatric research, the psychiatric social worker, whose work rapidly developed into a new profession. The social worker investigates the patient's environment and furnishes the psychiatrist with "objective" data about the patient's actual life, which can be confronted with the *"subjective"* data received from the patient

himself. Healy and I have recently started a study of this kind, the final results of which must be reserved for future publications.

But let us return to the problem of the psychoanalytic training of the medical student. There is no better proof of the psychiatrist's need for psychoanalytic training than the noteworthy fact that in Germany, as well as in this country, a considerable part of the rising generation of psychiatrists regard it as a necessary complement to their training to study psychoanalysis in one of the institutes. During their studies of psychoanalysis they come, without exception, to the conclusion that the new psychodynamic point of view is more helpful in the understanding and handling of psychoneurotics and psychotics than anything they learned during their regular university training. The paradoxical situation arises that young psychiatrists receive their most important training outside the medical schools.

The same situation is reflected in current psychiatric literature. The basic concepts of the Freudian doctrine have penetrated and reformed modern psychiatric thinking. Since I have already referred to this fact, a brief repetition may

suffice. The understanding of paranoid phenomena as the projection on to others of unacceptable tendencies, the estimate of schizophrenic behavior patterns as regressions to infantile forms of thinking and feeling, the recognition of psychoneurotic symptoms as dynamic results of repression, the understanding of melancholic self-accusation, self-depreciation, and suicide as introverted aggressions, are generally accepted as the best causal explanation of these disturbances. In so far as psychiatry has progressed from the mere macroscopic description of psychological features in mental diseases in the Kraepelinian sense and has become an explanatory science, it is based on Freudian views. Moreover, it is a matter of common observation that textbooks of psychiatry which are either ambivalent or hostile to psychoanalysis use Freudian concepts, with slight changes in terminology, whenever they attempt to explain psychological connections. In fact, in psychiatry, it is necessary only to discard the label to drink the otherwise forbidden Freudian draught.

It is not necessary to repeat the reasons why the young psychiatrist has to learn modern psy-

chopathology away from the universities in private institutions and frequently at a financial sacrifice. Denied the support of the state and the medical schools, education in psychoanalysis is at present a private undertaking. This circumstance alone is responsible for the unusual expense which training in psychoanalysis involves.

The importance of psychoanalysis for psychiatry should be sufficient to warn the medical authorities that it must not be left to the private initiative of the students to learn the basic concepts of psychopathology which in the last two decades have proved more useful and productive than the morphological investigation of the central nervous system. There is no justification for assuming that this condition will last. Progress in science has always followed advance in methodology and although the prevailing methods of brain research seem to be approaching their limit, no one can tell when new inventions will enlarge the possibilities of somatic research.

Teaching, however, cannot be based upon future possibilities. For the understanding and handling of the neurotic and insane, the knowledge of psychopathology which is at present

based on the dynamic psychology of Freud and his school is of decisive importance. In training the psychiatrist, the acquaintance with psychoanalysis has proved to be at least as important as somatic studies. There is no objective justification for the one-sided and exclusively somatic training of the psychiatrist. Teaching and research cannot for long be guided by the specialized interest of individual scientists and by their apprehension lest this new and unfamiliar approach might detract from their importance and endanger their exclusive control of the field.

The special training of the psychiatrist should be divided in two equal parts: Training in the morphology and physiology of the central nervous system and its disturbances and in psychoanalytic normal psychology and psychopathology.

The inclusion of psychoanalysis in the special training of psychiatrists requires very little formal change in present education, since some kind of medical psychology is usually a part of any psychiatric course, although in many medical schools every kind of psychology is either banned even from psychiatric lectures, or reduced to a

negligible quantity. The fundamental importance of psychogenic factors in "organ-neurosis," i.e. the functional disturbances of the inner organs, makes it necessary, however, that a course in psychoanalytical normal psychology should be placed at the beginning of the medical curriculum, parallel with the course in normal anatomy and physiology. This course should prepare the student for the understanding of functional disturbances in his later courses in internal medicine. This course should cover the same material as the introductory course in the Berlin Institute for Psychoanalysis. I gave a similar course in the University of Chicago and the terminal examination corroborated my expectation that the introduction to general psychodynamic concepts can be successfully given at the very beginning of the medical curriculum. This course should contain the empirical observations most important for the understanding of unconscious mental processes, i.e. the different manifestations of unconscious motivation in overt behavior. I refer in the first place to the following phenomena: hypnotism and post-hypnotic experiments, the errors of everyday life, the psychology of day-

dreaming and dreams. Furthermore, this course should give a general presentation of mental development, especially of instinctual life.

The major part of psychoanalytic study, however, could best be given during the training in clinical psychiatry, but before deciding on the most advantageous schedule, a few preliminary considerations should be discussed. In giving my own experience, I must say that my only regret has been that in the first period of my psychiatric work in the University Hospital in Budapest I had to deal with psychotics without the knowledge of Freud's work. In comparing this period with the following when I had taught myself some psychoanalytic theory, I can only describe the difference by comparing the situation of a tourist who is travelling in a foreign country with a knowledge of the language and customs of the inhabitants with that of another who lacks this knowledge. Once in possession of the code to the unconscious, the confusing variety of psychotic manifestations became intelligible human manifestations which could be treated intelligently.

Although the advantages of a preliminary

knowledge of psychoanalysis in clinical work are evident, the general experience of the last ten years has led to the unanimous conclusion that a thorough understanding of the unconscious processes is only possible through didactic analysis. I cannot here justify in detail the requirement of the International Psychoanalytic Association that study of psychoanalysis should follow the didactic analysis, and must refer to a recent publication "Zehn Jahre Berliner Psychoanalytisches Instituts," edited by the Berlin Psychoanalytic Institute.

The necessity for the didactic analysis of the psychiatrist makes it difficult for clinical study in general psychiatry to follow the factual psychoanalytic training. The best arrangement seems to me that the didactic analysis and the interneship in a psychiatric hospital should take place simultaneously, and we must content ourselves by preparing the student for his hospital work with a general presentation of the principles of psychodynamics at the beginning of his curriculum, and by a course in general psychiatry during the clinical semesters. This course would correspond to the usual descriptive presentation

of psychiatry but given from the psychoanalytic point of view. During the interneship, which should last at least two years, the detailed study of the psychoanalytic theory of neuroses and psychoses and of the psychoanalytic technique should be made.

The Berlin Psychoanalytic Institute has worked out a schedule based on ten years' experience. This scheme has undergone many modifications and in its present form can be considered as the most satisfactory curriculum.

This curriculum consists of three consecutive sections:

1. The student's own didactic analysis.
2. The theoretical training.
3. Practical training in the form of control analyses and participation in technical colloquium.

This third portion of the training needs some further explanation.

A control analysis means weekly consultation with a trained analyst. During this consultation a detailed report of the course of treatment conducted by the student is given and technical

PLAN OF STUDY FOR A COMPLETE PRACTICAL TRAINING IN PSYCHOANALYSIS

I. *Instruction-analysis* (Didactic-Analysis)

II. *Theoretical Training* (Prescribed Courses)

	First Year	Second Year
Fall Trimester (October-December)	1. Introduction to Psychoanalysis, Part I. (Analytic Normal Psychology.) 2. Introduction to interpretation of dreams. 3. Freud seminar: Three contributions to sexual theory.	1. Special theory of the neuroses, Part II. (Character disturbances, addictions, perversions, narcissistic neuroses, psychoses, criminality.) 2. Psychoanalytic technique, Part I. 3. Freud seminar: theoretical writings, Part I.
Winter Trimester (January-March)	1. Introduction to psychoanalysis, Part II. (General theory of the neuroses.) 2. Theory of instincts. 3. Freud seminar: Case histories, Part I.	1. Psychoanalytic technique, Part II (including indications). 2. Psychoanalysis and Sociology. 3. Freud seminar: Theoretical writings, Part II.
Spring Trimester	1. Special theory of the neuroses, Part I. (Transference neuroses.) 2. Application of psychoanalysis to Literature and Art. 3. Freud seminar: Case histories, Part II.	1. Psychoanalysis and Education. 2. Symbolism and art of interpretation. 3. Freud seminar: Writings on Technique.

III. *Further Training*

1. Practical Studies in Therapy (Control Analyses)
2. Technical Colloquium.

questions are discussed. A similar procedure is carried out in the technical colloquium in which several students participate. Since public demonstrations of technique, as in surgery, are impossible, these seem to be the only possible forms of practical training.

Section 2 (theoretical training) is devoted to courses on medical psychoanalysis but contains also a notable feature in three courses of a more sociological and humanistic character on Symbolism and Art of Interpretation, Application of Psychoanalysis to Art and Literature, and Psychoanalytic Sociology. In introducing these latter courses, we have proceeded from the experience that candidates who have some acquaintance with the humanities are far superior in their psychological understanding of the mentally sick to candidates trained only in medical and natural science. Next to the dream, the clearest manifestations of the unconscious are found in art and literature, especially in the popular art, customs, and superstitions of primitive peoples. Furthermore, sympathy with the emotional life of others is more characteristic of the man of philosophic and literary culture than one who, though medi-

cally trained, knows nothing of the emotional life of the sick or of psychology in general.

To sum up my proposition: the teaching of psychoanalysis should take place in three different required courses, the first two for undergraduates and the last one for graduates:

1. Elementary introduction in Psychoanalytical Normal Psychology, ([a] Manifestations of the Unconscious, [b] Development of the Personality) given at the beginning of the medical curriculum parallel with the course in anatomy and physiology.

2. Theoretical course in general psychiatry, one part of which should be devoted to psychoanalytical psychopathology.

3. Training in psychoanalysis during the interneship in a psychiatric hospital consisting of (a) didactic analysis, (b) theoretical training and (c) practical training.

The third part of this scheme is well established through many years' experience at the psychoanalytic institutes and has actually been followed by many young psychiatrists of both continents. Its introduction into the official postgraduate training of psychiatrists does not

involve any innovation or experimentation and would mean merely the official and formal sanction on the part of the medical faculties of a procedure which is followed more and more by the younger psychiatric generation.

The first two suggestions about the teaching of psychoanalysis during the undergraduate medical curriculum, however, involve a fundamental innovation. The significance of this innovation would be that the medical school would accept the view that the human system is not merely biological, but psycho-biological, and that training in medicine should consequently be based on a knowledge of the personality as well as of the body.

If I have succeeded in convincing the medical profession that the present state of affairs, in which a fundamental, practical and theoretical contribution to medicine is excluded from the medical schools, is unjustified and undesirable, this book will have served its purpose.

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